

10-799-747

EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCTCAGGA TTNAAGCACA GTGCCTGGCA TACAGCAGGT GCTCAATAAA TACTTATCAA 60  
ATTGGAAA 68

5

SEQ ID NO:5087

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS06075

SEQUENCE DESCRIPTION:

15

GATCAAGGTT TAGTTTAACT TCCACTGTTA AAATAAAGCT TACATAGTTT TCITCCTTTG 60  
AAAGACTGTG CTGTCCTTTA ACATAGGTTT TTAANGACTA GGATATTGAA TGTGAAACAT 120  
CCGTTTTTCAT TGTTCAC TTC TAAACCAAAA ATTATGTGTT GCCAAAACCA AACCAGGTT 180  
CATGAGTATG GTGTCTATTA TAGTGAACAT GTACTTNGAG CTTATTGGTT TTATTCTGTT 240  
ATTAGATNTT TCAGGGTGTA AACANGNNN 269

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SEQ ID NO:5088

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06076

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SEQUENCE DESCRIPTION:

GATCGGCAGG GCAGGAATCT GAGCGCTGGC CCCGTGGTGA GGCCATGTTT TCATAATCAG 60  
GCTCCAGCCA GAAAAATAAG AAACACCGCA ACAGGCTTCA GTATCAGGGC TGAAACTGCT 120  
GGATGANTAA ACTATTTATT AAAAACGGAA A 151

30

SEQ ID NO:5089

SEQUENCE LENGTH:267

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35

CLONE:HUMGS06077

SEQUENCE DESCRIPTION:

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GATCTTGGCT TAATTTAATG TATTAATCTG TTTGTGCAAA CATAGTACCA CCATTTAAAA 60  
ATGTTAGGGA GATGAGTTGC AGTTTTTATA ATAGATTTT TTTAAAGTTT GGTATTGTAA 120  
ANCATTCACA CCTCTGTCCC TCAAANTGN TAATTACGGT TAAAGTGCAG TCATTTGTGG 180  
NTAGAATCTT GTTNGTTGC TNCCATTATT GGGGTCCNCC NAAGGAATTG AGGAGAGGNC 240  
CGAATAGAGC CCAATTCNTA TAANGAN 267

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SEQ ID NO:5090

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06078

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SEQUENCE DESCRIPTION:

GATCTCAGGG AAAAATTTTA ATCACTGTGT ATAATGATAC TGAACCTTGA TTAATAACAG 60

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AAATTCAGGA TGTAAGCCA CAGAATGGGN TTTATTAATG TGGGATACCT CAGACTGTTT 120  
GTTTTCTTTC TGGGNAGCAA AGTGTGTTCT ATAATGAATA AATATAGAGT GGTTTTTAAA 180

SEQ ID NO:5091  
SEQUENCE LENGTH:121  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06079

SEQUENCE DESCRIPTION:  
GATCTTCCTG GNACCTGAG GGTCGTCCTC CAGCAGGGGC TTCTTNGACC CCTGTCTGAG 60  
GGGTCGCGTC TTAGTGGGCG GGATTCTTTT CCCTTTGAAT AAAAATGGAT TCAAACCCAA 120  
A 121

SEQ ID NO:5092  
SEQUENCE LENGTH:378  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06080

SEQUENCE DESCRIPTION:  
GATCTGTNTT GTTCCTGCAG CAAAAATCCT CTATGGACAT AGGAGGTGCT GTGTCCCATG 60  
CCCTCTTGCC CTGNCAGTGT CCCATGGGCC CCCTTCTGCT CCCTGCCCCC TCCCTGCTAC 120  
TGCTGATGCA CTGTCCTCTC CCTGCAGCCC CTGGCTTCEN AGCCTTCCTC CTGACCCCTT 180  
CCAACAGCCT TGGAACTCCA GCTGCCACCA CCCTNTGGGT CGGACACTGG GACCCANTGG 240  
NCCAGTCTTG GNTGCTGNTT ACCCCTAGCC TTGATGNCTG CCCAGGGGAC CCCNAGCCCN 300  
CTTCNGTTGN CNTGCAGCTT TAACAGAGTG AACCATGTGT ATTGTACAGG CGGGGGTTGT 360  
TAATTGNAGA AAACNNAN 378

SEQ ID NO:5093  
SEQUENCE LENGTH:81  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06081

SEQUENCE DESCRIPTION:  
GATCACACCA CTGCACTCCA ACCTGGACAA CAGAGCAATA TTGTGTCTCA AAAATAATA 60  
AATAAATAAA TAAATAGTAA A 81

SEQ ID NO:5094  
SEQUENCE LENGTH:302  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06083

SEQUENCE DESCRIPTION:  
GATACCCCGG AAGTTCAGGC TGAATTCTGA AGGCAAACTT GAGCAGACGG TCTCCATGGC 60  
AACCACGACA CAGCCAATNA CTCAGCATCT TCACGTCACC TACAAGAAGG TGACCCCGTA 120  
AACCTAGAGC TTCTGGAGCC CTCGGGAGGG CCTGGCTACT GTGCCTCAAC GGTTCCGGCTC 180



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CTCAACAGAC AGTCCCTGCG GCAGAAAGTGG GTGTGGCCGT GAGCCTCTGC AGGCTCAAGA 240  
GTGTTGTCCA GATGTTTCTG TACTGGCATA GAAAAACCAA ATAAAAGGCC TTTNTTTTAA 300  
AA 302

SEQ ID NO:5095

SEQUENCE LENGTH:55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06084

SEQUENCE DESCRIPTION:

GATCTGACTT CAGTTGTGCA GATNACAGCA TGATAAATGA GTCGGGACCA TCAAA 55

SEQ ID NO:5096

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06085

SEQUENCE DESCRIPTION:

GATCAACAGA TGCTGGCAGA AATGGCTGTN TCCCTGGCCT TGAGAAGCAG ATNCAGCTCC 60  
CTGTCCCCAG AGGCCTACAG TCATATGGTA CCNCCACAGN CTCGCTTGGN TGCCTACAG 120  
GAGGCGGCGT CANGGAAGCT TNCTN 145

SEQ ID NO:5097

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06086

SEQUENCE DESCRIPTION:

GATCTCATGA GAATTCACCTC ACTATTATGA GAACAGCATG GGGAAAAACCN CTCCCATAAT 60  
TCAATCACTN TCCTCTCTCC ACACGTGGGG ATTACAATTG GAGACAAAAC CTGGGTGGGG 120  
ACACAGAGCC AGACTATATC AGGGGGCTTA TGTTTATCCA NTTGTNATGG CCTCACTTNT 180  
TGNAAGACT GTNCTNNCN 199

SEQ ID NO:5098

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06087

SEQUENCE DESCRIPTION:

GATCACAGAC TGTAAGATT TGAAAAGTCA CTTTTATTTT NAATTATTN ACATATGCAA 60  
CATGAAGAAA TCGTGTAGGT GGGTTTTTTT TTNAATAAC AAAATCACTG TTAAAGAAA 120  
CAGTGGCATA GACTCCTTCA CACATCACTG TGGCACCAGC AACTACTTCT TTATATTGTN 180  
CTTCATATCC CAAATTAGAG TTTACAGGGN CAGTCTTCAT TTACTTGTA ATAAANTATG 240  
ANTCTCAAA 249

SEQ ID NO:5099

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06089

SEQUENCE DESCRIPTION:

GATCTGCAGT CCTGCCTCTG CCACAGTCTC TCTGTTGTCC CCACATCTAC CCAACTTCCT 60

GTACTGTTGC CCTTCTGATG TTAATAAAAG CAGCTGTTAC TCCCACAAA 109

SEQ ID NO:5100

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06090

SEQUENCE DESCRIPTION:

GATCACGGAC GTGCAGCTCG CCATCTTCGN CAACATGCTG GGCCTGTGCG TCTTCTTGCT 60

TGTCGTTCTC TATCACTACG TGGCCGTCAA CAATCCCAAG AAGCAGGAAT GAAAGTGCG 120

CTTTCTCCGN CCCAGGGTTC CAGGACATAG TCTGAGGCAA GATGGAGGGT ATGTGGGGCC 180

TTCACTTTC ACTTCATCCC TTCTACCCAT CACANCATAC AAAGCANCTA CACCTGGATT 240

TTTCCAAACA ACTTTTATTT CCTCAGAGTC NGNNGNAATN CTATGGNNCA AGANGCTGNC 300

ACTGAATAGG GCCNAGTATA GGGGCTTGCT TTTCTACTCT N 341

SEQ ID NO:5101

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06091

SEQUENCE DESCRIPTION:

GATCTGGTAC CGCAGTAGCG CCGCCGCCGC CGCCGNCGGA GCCTGTCGTC GTCCTGTCCC 60

CAGCCTNCTT GTGTCCCGTG AGGTTGTCAA TAAACCTGCC CTCGGGCTGC CGGCAAA 117

SEQ ID NO:5102

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06092

SEQUENCE DESCRIPTION:

GATCCAAAAG GACTCATCTA AAACACAAGT TGGGTAGAGG AGATAGGTGA GTACTATTAT 60

ATTATGTTCA TGGAAAATNA GTTCATGGGC TTTCCTCTAA TTTTATTTT AAAAATAAAT 120

GTAAATATTA AATAAAATTT TTAAATGAA A 151

SEQ ID NO:5103

SEQUENCE LENGTH:86

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06093

SEQUENCE DESCRIPTION:

GATCAGCTTT TAATATCTGT CAAATAAAAA TTGAAATTGA AGATGGTATA TAAGATTCTA 60  
 GNAAATAAAC TACTCTGAAT ACTAAA 86

SEQ ID NO:5104

SEQUENCE LENGTH:210

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06094

SEQUENCE DESCRIPTION:

GATCTAATCC GTNTCCCACA TGTCCCAGGG AATCCNAGGT CTGCCCTGAG CTTCTGTGT 60  
 CCTTGGNAAA GTCGGTTAAT CTCTGGGCCT CACTGTCCTC ATCGCTGAGC TTGGGGACTT 120  
 GTAACANATG ATTTCTAAGT ATCTNCCAGC TTTGANTAGA GCATTTGTNT TGGGTGGCCA 180  
 GGCTTAANGT TTAAAGGCAT AANGAAAANN 210

SEQ ID NO:5105

SEQUENCE LENGTH:242

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06095

SEQUENCE DESCRIPTION:

GATCATATTG GTCATGTCTA TTGGTGTATT ATTTCACTAT CACCAATGTT TTCAGAAATA 60  
 CAGTACTAAT TCATCATTAA ACTCTTTGAA GTTAATATTT TCCTGCCTTC TAACTTATAG 120  
 ACTCAACTAT GTATCTGTAG TTTTGGGAA TGGGGTGGTG TTTTNNCTT TGTGTTGGGA 180  
 AGTTATTGAG AAAACCTATA TAATANAATT NAANATTATA GTTTAAAAA AANNNCANNN 240  
 NN 242

SEQ ID NO:5106

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06097

SEQUENCE DESCRIPTION:

GATCTGCCCT TGGCCTCCCA AAGTGTCGGA ANNACAGGCA TGNGCCACTG AGCCTGANCC 60  
 ACTTTAGCTA TTTTAAAAA TAGGACCTAT TGTTTTGGAT TACTATCTGA GAATTCATG 120  
 GATTCACCTC TGGGTATAGG AGNTAAGAAT ACGTTTAATT CATAACTTTT ATATTANCCA 180  
 ATATAGTAAA AAAATAAAGC TCACACATAC ANAANCAAA 219

SEQ ID NO:5107

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06098

SEQUENCE DESCRIPTION:

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5 GATCTATTTT TTGGGCTTTT AATATTCTGT TCCATTGACC TATNTCNCCT NTCTTTTACC 60  
 AATACCGCAA CATCTTGGTT ACTGTAGCTT CACGGTAAGT CTAAAACTT GGATATTGTC 120  
 AGTCCTCCAA CTATGTTCTA CTCCTTCAAT ATTGTGTTGG TTATTCTGAG TCTGNNGGG 180  
 TCTCCATATA AATNGTAGAA TTAGAAAAAA AANNGNGGGG GGGANNN 227

10 SEQ ID NO:5108  
 SEQUENCE LENGTH:135  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06100  
 SEQUENCE DESCRIPTION:  
 15 GATCAGTTTG GACTCTGTAA CTCATAGGTG CATTCTTTT TTCTTTGGTG TCTCACAAAT 60  
 NACCCAATTG TTGAATAAAA CTATAAATAT GTTAATACCA GCTTTTCCA ATAAAAAATC 120  
 AAATGTTACA TCAAA 135

20 SEQ ID NO:5109  
 SEQUENCE LENGTH:167  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06101  
 SEQUENCE DESCRIPTION:  
 25 GATCTNATGG GTTAAAAAGN GCGGCATTTC CCTCCNCTTT CTCCCTCTCC TGCACCATGT 60  
 TAAGATGTGC CTGCTTCCC CTTGCCTTC GACCATGATT GTAAGTTTCC TGAGGCCTCC 120  
 CCTGCCATTC AGAACTGTGA GTAAATTAAA TCTCTTNCCT TTATAAA 167

30 SEQ ID NO:5110  
 SEQUENCE LENGTH:101  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06102  
 SEQUENCE DESCRIPTION:  
 35 GATCTTCTGC CACCATCAGG GNCAACGGG TGCAGGAGGA AAGTCACTGA TGCCAGATG 60  
 TTTGCNTCCT GCACAGCTAC AGGTCCTTAA NAAAAAGTNT N 101

40 SEQ ID NO:5111  
 SEQUENCE LENGTH:172  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06103  
 SEQUENCE DESCRIPTION:  
 45 GATCTGTGGC TACTTTCACA CCACAACAGA GTACCATGGT TCTGACAGAG ACTAGGAGAC 60  
 ACAGTCTAAA TGACTTCTGA CCTGGACCTT TACTGAAAAT CCTGCCAATC ATTCTGTTGG 120  
 CAAGANTGAT GTATTACTTT TAGCAATAAG AAACAAGTAA CCTTTGCAGA AA 172  
 50

55 SEQ ID NO:5112

SEQUENCE LENGTH:74  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 5 CLONE:HUMGS06104  
 SEQUENCE DESCRIPTION:  
 GATCTCCAAA GCTGTCCTCT GCGTCCAGG AGTGCCTCTT ATGTGAGTCC TAATAAACTC 60  
 ATCTATTAC CAAA 74

10 SEQ ID NO:5113  
 SEQUENCE LENGTH:134  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS06105  
 SEQUENCE DESCRIPTION:  
 GATCTNTTCC CACCCATAAA AAGCCCAGAG AACAAAAAGT TGGCCCAGGA AATGCAATTN 60  
 GGAAGCTGAA GAAGATTATA GTATTNTNG CAGTCAAGAT TTGAAAAGTT ACCNACTAAG 120  
 20 AAGCTACAAT ATNN 134

SEQ ID NO:5114  
 SEQUENCE LENGTH:186  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS06107  
 SEQUENCE DESCRIPTION:  
 GATCTTGAAA TNAACCTAAG ATTTTCCTGG GGAAATGTTT AGATACAGTT TTGTGAACTG 60  
 30 TAAATCAAAA TACCTTTTNC TACAGTTTAT CTTNATNTC CTGCAAATTT AGGAACATAT 120  
 TTCCTCGTTT NCACATTGAA TCTTAAGTTT AAGCNCTTCA TTTGGNATTT NGGCAATATA 180  
 TGNGAN 186

35 SEQ ID NO:5115  
 SEQUENCE LENGTH:275  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 40 CLONE:HUMGS06108  
 SEQUENCE DESCRIPTION:  
 GATCTTTNTG ACTAGAGTTA GTGTCTAGG AAAACCAGAA CTCAGAACTT GCCTCCATGG 60  
 TTGAGTAACA AGCTGTACAA GAACCCCTTT TATCCCTGGA AGAGGCTGTG TATGAAACCA 120  
 ATGCCAGGG TTTGAAGGGT GTTAGCATCC ATTNCAGGGG AGTGTGGATT GGCTGGCTCT 180  
 45 CTGGTAGCAT TTTGTCCTNA CACACCCATC TACTATGTCC AACCGGTCTG TCTGCTTCCC 240  
 TCACCCCTTG CCCAATAAAG GNCAAGNNCT TCAAA 275

50 SEQ ID NO:5116  
 SEQUENCE LENGTH:122  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

55

CLONE:HUMGS06109

SEQUENCE DESCRIPTION:

5 GATCGAGTGG TCTGTGTTCC TATTGCTGGT GGGGTGATAG GGTGGGCTAA AAACCATGCA 60  
 CTCTGGAATN TTTTGTATTT TCTCCAGTA AAGCTTTTCT TCTCCGAAA AAAAAAAGA 120  
 AA 122

SEQ ID NO:5117

SEQUENCE LENGTH:94

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06110

SEQUENCE DESCRIPTION:

15 GATCACAAC TACAGCCTGC AGGCCAAATC CAGCCACAG CCTGTNTTG TAAATAAAGC 60  
 TTTGTTGGAN CAAAGCCACA CCCCTTAATC TAAA 94

SEQ ID NO:5118

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06111

SEQUENCE DESCRIPTION:

25 GATCTGAATC CAGNTCATT GAGGGAACCC CCAAGGTTCT CTGGTTGTGG CCTCTTGAAT 60  
 AAACCTCTCA CATTGGAAA 80

SEQ ID NO:5119

SEQUENCE LENGTH:274

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06112

SEQUENCE DESCRIPTION:

35 GATCTATTAT CTAGCTGCAA AGCCTGGCTT TGNTTGNAA TTTTGTA AAA ATTTCATGGC 60  
 ACCCAAGGTT TCTGNTTCTG ACCCAGCAGT GGTCTGAAG AGAGCTGATG GCAAGTNTTG 120  
 TAGTCATTTT GATTTTAATT GAAGGGTGAG CATAACCTTG TGAACCAGCA CTAGCTTGTT 180  
 CCAAGCTGGA ATTTATCTAA TCTATTTTGG TGTTTAAAAA AGCTGTACCT ACCAAATAAA 240  
 40 TAAATAGTTT ATAAAAATGTA TTACTTAAGG TAAA 274

SEQ ID NO:5120

SEQUENCE LENGTH:350

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06113

SEQUENCE DESCRIPTION:

50 GATCTTTGAA GATATCCTCA ACGTGAGGCT CTNCTGCCAT GAAGGTGAAG ATTAAGTGCT 60  
 GGAACGGCGT GGCCACTTGG CTCTGGGTGG CCAACGATGA GAACTGTGGC ATCTGCAGGA 120  
 TGGCATTTAA CGGATGCTGC CCTGACTGCA AGGTGCCCCG CGACGACTGC CCGCTGGTGT 180

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GGGGCCAGNG NNCCCACTGC TTCCACATGC ATTGCATCCT CAAGTGGCTG CACGNACANC 240  
AGGNGCAGCA GCACTGNCCC ATGGTGCCGN CAGGAATGGA AGTTCAAGGA GTGAGGCCCG 300  
ACCTNGNNTC TAGNTGGGAG GGGNATNCTG AAGACTTCTT TNCTTNATTN 350

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SEQ ID NO:5121  
SEQUENCE LENGTH:360  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06114

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SEQUENCE DESCRIPTION:  
GATCTTATTC AGTCTGCTGN TTTGTATAGT GTGATGACCC TAGTAAGCAC ATATTTGGTA 60  
GCCTTTGCAT ACAAGANTGT GAAATTTGTT CTCAAGCACA AAGTAGCACA GNAGNGGGAA 120  
GATGCTGTTT CCAAAGAAAGT GACTCGAAAA CTTTCTGAAG CTGATAATAG AAAGATGTCT 180  
CGGAAGGAGA AAGATGAAAG ATTCTTGTGG AAGAAGAATG AAGTNNCINN ATTATGAAGC 240  
TACANCANNT TCCATCTTCT ATAACAACAC TCNGTTCCTG GTCGTNGTCA TTGTTGCTTC 300  
CTTCTTCATA TTGGAAGAAT TTCAACCCCA CAGTGAACCA CANATTGTG CATAAGTTGN 360

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SEQ ID NO:5122  
SEQUENCE LENGTH:88  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06115

25

SEQUENCE DESCRIPTION:  
GATCTGGTCA CACCTAAAGT CATTAAAAATC ACTGAAATGT TTAGATACAC AGCCCAATAA 60  
ATTCTCTTTA TAAACACAA GCAGTAAA 88

30

SEQ ID NO:5123  
SEQUENCE LENGTH:177  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06116

35

SEQUENCE DESCRIPTION:  
GATCAGGCCA CATAAGGAAC AGGGGAATTC CAGGGGTGGG ACACAGCTNG GGGAGTCCAG 60  
ACCAGGGCAG GGAAAGGAGA CTCACAAGCC AAACAGAGCT GCTTTGGGGA AAGTTCTTAT 120  
CAGCTGGTGC TGCTTCCTGA GCCATATGCC CATTCTCAA GCTGTACCCN NNNNNN 177

40

SEQ ID NO:5124  
SEQUENCE LENGTH:60  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06117

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SEQUENCE DESCRIPTION:  
GATCTTGGAC CTCCAGCCT CCAGAACTGT GAGAAATAAA TNTGTTTGT TTCAGCTAAA 60

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SEQ ID NO:5125

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SEQUENCE LENGTH:54  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06118  
 SEQUENCE DESCRIPTION:  
 GATCTGGCTG ACTCACACGC GACTGGAGAA TAAACAAACA GCAACATAAG GAAA 54

SEQ ID NO:5126  
 SEQUENCE LENGTH:316  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06119  
 SEQUENCE DESCRIPTION:  
 GATCTCCCAT GGGTCACCCA GGTCCTATGC CTCCGCATGG TATGCGTGGA CCTCCTCCAC 60  
 TGATGCCCCC CCATGGATAC ACTGGCCCTC CACGACCCCC ACCCTATGGC TACCAGCGGG 120  
 GGCTCTCTCC TNCACCCAGA CCCACTCCCC GGCCACCAGT TCCCCNTNGA GGCCCACTTN 180  
 GAGGCCCTCT NCCTCAGTAA ATTCACATTT TNCTTCCTNC TGTACATTT TNCNAATATN 240  
 TTTTCTATTC CTTGGACCAA TCAGAGATGC TGTAGCTTNC TTGGGGCAAA GGGTACTAAA 300  
 TCNCNTTTNA GCACNN 316

SEQ ID NO:5127  
 SEQUENCE LENGTH:222  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06122  
 SEQUENCE DESCRIPTION:  
 GATCCTGTTC CTGTACCAT TGCTCTCGAT TCACTCAGCT GGCTGCTACT TCGCCTTCCC 60  
 TGCACCACAC TCTGCCAGGT CCTGCATGCT GTGAGCCATC AGGACTCTTG TCCTGGTGAG 120  
 ACCCCTCCTT CATTGTTTCC CCTCATACAT CTCCCTCTGC CAAGGAGTGT GCCCCTTTTC 180  
 CTTTCTACCC TAGAATAAAC ATCTGGGTTT TCCAGTCAGA AA 222

SEQ ID NO:5128  
 SEQUENCE LENGTH:130  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06123  
 SEQUENCE DESCRIPTION:  
 GATCGACTGG AACAAAGTGA CCGCTGNGTA AAATACTGC CTTGCCACTC ACTGTTGTAT 60  
 ACATTTCTTA TTTACGATTT TCATTTGTTA TATATATATA TAAANATACN GTATANANAT 120  
 GCAACATANN 130

SEQ ID NO:5129  
 SEQUENCE LENGTH:160  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear



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CLONE:HUMGS06125

SEQUENCE DESCRIPTION:

5 GATCTTAGAG CTAAGGGA CTGTAAAAAT TACCCAGAAC AGCGTCCTCA GACTTAACCT 60  
TCTGCAAGTT ATGTCTGTAT ATAAGANGAT TCTAATTGCT AACTGTTTAT ACTTTNCTGN 120  
ATAAAATAGT TGTTCCTAAT TAAAANGTAG CCAAGCTAAA 160

SEQ ID NO:5130

10 SEQUENCE LENGTH:349

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06126

SEQUENCE DESCRIPTION:

15 GATCTTCGTT CAGGGCATCA TCTGGGACAT CAACAGCTTT NACCAAGTGGG GAGTGGAGCT 60  
GGGAAAGCAG CTGGCTAAGA AAATAGAGCC TGAGCTTGAT GGCAGTGCTC AAGTNACCTC 120  
TCACGACGCT TCTACCAATG GGCTCATCAA CTTTCATCAAG CAGCAGCGCG AGGCCAGAGT 180  
CCAATAAACT CGTGCTCATC TGCAGCCTCC TCTGTNACTC CCCTTTCTNT TCTCGTCCCT 240  
20 NCTNCCCGGA GCCGGCACTG CATGTTCTTG GACAACACCC AGAGCACCC NTNGTTGTGG 300  
GNTTTTGNNC NNCGAGCCCT TTAGCNGGGA ANGNCCTTGGT CTTCCNCCAN 349

SEQ ID NO:5131

25 SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06127

SEQUENCE DESCRIPTION:

30 GATCCTCAAG GACCTGTAAT TTTTGGTAT TTAAATTA AATAACATTA TTTTATTTT 60  
GANTTTTTT CAAACAGTAA GAATAATATA TCAGCAGCAT GTATCTGCCA ATCATATGTA 120  
ATAAATNTT TATTTTGCCA AAACCAAA 148

SEQ ID NO:5132

35 SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06128

40 SEQUENCE DESCRIPTION:

GATCTAATAC AAGANCTAGC AAAGCAAAAG TTTTGCAAG TGACAGCATA AAGACGGANC 60  
ACAACAAATC CTTCTGNAG TGAATTAGGA AACTCCANGG N 101

SEQ ID NO:5133

45 SEQUENCE LENGTH:347

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06129

50 SEQUENCE DESCRIPTION:

GATCCTCATT CTTTCCCCG TACAGTGGAA AACATCTTN ATGTTTCCTT CATTATACGG 60

55

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GATGGTTTTN CAAGAATAAG ACTTGACCAA GACCGACTGC CAGTAATAGA GCCTGTNAGT 120  
 ATTAATGAAG AAAATNAGGG ATTTGAACAT AACACACAAG TTAGAAATCA AGGAATTATA 180  
 GCTTTGAGTT ACCGTGACTG GGNGGNGATT GTGAAGACCT TTTGAGATT CAGAGCCTGT 240  
 5 GATTACTCCA AGTCAGAGGC AGCAGNNGNC AAGTNCCTTG NTTGCTAGCT GAAAGGACTT 300  
 AAATGGNTAG TGAAGGTCCA AAACCGGGNA AGCGGCATNG TGTTGGN 347

SEQ ID NO:5134

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06130

SEQUENCE DESCRIPTION:

15 GATCACACTG CAGTTTCCAT GTTAGCACTG TGGATGGGTT TTNAATCAAT AAAAAGTGGG 60  
 GGTTTCTTCA AA 72

SEQ ID NO:5135

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06131

SEQUENCE DESCRIPTION:

25 GATCTGTAAA ATAAAACTC AGCTGGGTCC AGATATCAGG TGTCTAAAT CTAAGAATGT 60  
 AAGAACAATC TTAATAGAAA TATGTNTTAA ATAAGTGGCT AATATCTACA AATAGTACCT 120  
 TTGCTAAATG ANTTCCTTTT NATGACTATN TTGTTTTTNA GNAATTGGGT GAAAAANNCAA 180  
 CTGANATGAG ATTATTTATN ATN 203

SEQ ID NO:5136

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06133

SEQUENCE DESCRIPTION:

35 GATCTTAGAT TTNATGAAGC ACAGTATGCA GGTAGGCCTA ATGGGGGAAG ATGGTAATAT 60  
 AAAAGCAAGA AGTATTTTTT TTTTGAAGT GCCTGAANGC TGCTGNGG NTGCCCTCCC 120  
 40 CTNCCCTN 129

SEQ ID NO:5137

SEQUENCE LENGTH:270

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06136

SEQUENCE DESCRIPTION:

50 GATCACCTGA GGTCTGGGAGT TCGAGACCAG CCTGACCAAC ATGGAGAAAC CCCATTTCTA 60  
 CTAATAATAC AAAATTAGTC AGGCATGGTG GCGCATGCNT GTAATCCCAG CTACTTGGGA 120  
 GGCTGAGGCA GAAGAATCGC TTGAAACTGG GAGGCGGAGG TTGCGGTGAG CCGAGANCA 180

GCCATTGCAC TCCAGCCTGG GCAGCAAGAG TGAAGCTCCA TCTAAAAATA AATAANTAAA 240  
TAAATAANTA ANCCCTCANA NNNAAAAATN 270

5 SEQ ID NO:5138  
SEQUENCE LENGTH:51  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS06137  
SEQUENCE DESCRIPTION:  
GATCTGTAGG GGAGGGAGTT CAAATAAAGC TTTATTTTTT TCATTTTCAA A 51

15 SEQ ID NO:5139  
SEQUENCE LENGTH:190  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06138  
20 SEQUENCE DESCRIPTION:  
GATCTGGGCT CCCTGACTTT CTGAAGCTAG AAAAAGGTTG TGTCTCCAA CCACCTTTC 60  
ATCCCGAGCC CCTCTCATCC CTGGAGCACT CTGCCGCTCA AGAGCTGGTT TGTTAATTAT 120  
TGTTAGACTT TGCCATTGTN TTCTTTTGTA CCTGAAGCAT TTTGAAAATA AAGTTTACTT 180  
AAGTTATAAA 190

25 SEQ ID NO:5140  
SEQUENCE LENGTH:199  
SEQUENCE TYPE:nucleic acid  
30 TOPOLOGY:linear  
CLONE:HUMGS06139  
SEQUENCE DESCRIPTION:  
GATCGGGAGG ACCTGTATGC CTGACCGTTT CCCTGCCTCC TGCTTCAGCC TCCCGAGGCC 60  
35 GAAGTCTCAG CCCCTCCAGA CAGGCCGCTG ACATTCAGCA GTTTGGCCTC TTCCCTCTG 120  
TCTGTGCTTG TGTGTTGAC CTCCTGATGG CTTGTCATCN TGAATAAAAT ATANTAATAA 180  
ATTTNGTATA AATAGGAAA 199

40 SEQ ID NO:5141  
SEQUENCE LENGTH:312  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06141  
45 SEQUENCE DESCRIPTION:  
GATCCAACCA CTCAGCCTC CCAAAATGCT GGGATTATAG GCGTGAGCAC TTGCACCTGG 60  
CAAAAAAATT TTTTAAAAA AAGGAGAAAG CAGTTTAACC ACAAACAGTG AAACAGAGCT 120  
GGCAGACGCC TGAACTCCA TGGAACCATG CAGCTGTACC CTAGGGCTCC TCCAGGAAA 180  
AGAGAGATGT CAACGTGGCC CAAGGTGTCC TGAAGCACTG GGATTGNTT ANCTCGAGCG 240  
50 NTGGCCTTCC CAGCCCTNCG TGCTGCAGAG CCTCTGCTCG CTAGGCTNCC TTCATNCTNA 300  
CTCTGTGTGC TN 312

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EP 0 679 716 A1

SEQ ID NO:5142

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06142

SEQUENCE DESCRIPTION:

GATCTAAGAC AGCAAAGAAG TGTGCAAGGA GGGCCCTGTT AGCTCCCACT GTCCTGGTTT 60  
CTCCTCCTGG AGTCTAATTT CCTTGGCCCT CTGAGCCTTT TGAGTCTGGG CCCTGGTCCA 120  
ATGCTGCTGT TGTCTGAGGA ATGGTTTGGT GAGAACAGAT GTTAGAACTT GTTTGTTGAT 180  
TCTTGTCTGG CTAATAAATC ANCACCAACT GNCTTCTCCN ACAGGGAAA 229

SEQ ID NO:5143

SEQUENCE LENGTH:332

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06144

SEQUENCE DESCRIPTION:

GATCTAAGAT TATTCCTCATG AGAAATGTTG AATTTATGAA GAATAGATTT TAAGGCTTTG 60  
AAAATGGTTA ATTTCTCAAA AACATCAATG TCCAAACATC TACCTTTTTT CATAGGNGTA 120  
GACACTAGCA AGCTGGNCAA ACTATCACAA AAGTATTTGT CACACATAAC CTNTGGTCTG 180  
TTGCTGATTA NTACAGTACT TTTTCTTTGT GTGATTCTNA ACATTATAGC ACAAGTATTA 240  
TCTCAGTGGG TTATCCGGAA TAACATCTGA AAGNGGGGTT CATCTNTGGT NNGGTTTGCT 300  
CNNTAAACTA GNGTNTCTCC TGGTCCCACT GN 332

SEQ ID NO:5144

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06145

SEQUENCE DESCRIPTION:

GATCACATCA CGGAATATTC TTTGCCTTTC CACTTTCCAG GAAATCTCTC GGACTGGGCT 60  
AGCCTCCTTG TGTGTGATGA AAGATGGGCT ATATTCAGA ACANAGTGCT GTGTTGTCAT 120  
GATTTGCCTG GACTCCCAGG GCGTCTCTTA CCCAACTGA TAACGATGCT GTTCATTAGC 180  
AGCCTGTGTT AACTGATAAC CAAGAGCGGT AATGTGATAC TCATAAGCAA TTTTCTGTGT 240  
GTAGGATAAA ATANNCCATC TTGTATNATT NCAAA 275

SEQ ID NO:5145

SEQUENCE LENGTH:92

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06146

SEQUENCE DESCRIPTION:

GATCTCTTTT CAAGTCACT CATTCTTCT TCTGTAATGT TCAATCTCTC TTAAGAAAAGT 60  
CCAAATAAAT TTTTCATTTT AGAGAGTGA AA 92

SEQ ID NO:5146

SEQUENCE LENGTH:323

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06148

SEQUENCE DESCRIPTION:

GATCTGGGCA TTAAGTCAGT GGCTTTGCAT AGCTTTCACA AGTCTCCTAG ACACTCCCCA 60  
 CGGGAAACTC AAGGAGGTGG TGAATTTTAA ATCAGCAATA TTGCCTGTGC TTCTCTTCTT 120  
 TATTGCACTA GGAATNCTTT GCATTCCCTTA CTTGCACTGT TACTCTTAAT NTTAAAGACC 180  
 CAACTTGCCA AAATNTTGG CTGCGTACTC CACTGGTCTG TCTTTGGATA NTAGGNATTC 240  
 AATTGGCAA AACAAAGTGT AATGTCAGAC TTTGCTGCAT NTTACACATG TGCTGATGNT 300  
 NACAATGGTG NCGAACATNA GTN 323

SEQ ID NO:5147

SEQUENCE LENGTH:347

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06150

SEQUENCE DESCRIPTION:

GATCTTTTGA GTGGAGGTGG GTAGAGAGAG CAAGNAGGGC AGGACACTTA GCAGGCACTG 60  
 AGCAAGCAGG CCCCCACCTG CCCTTAGTGA TGTTGGAGT CGTTTACCC TCTTCTATTG 120  
 AATTGCCCTG GGATTTCCTT CTCCTTTCC CTGCCACCC TGTCCTTAC AATTGTGCT 180  
 TCTNAGTTGA GGAGCCTTCA CCTCTGTTGC TGAGGAAATG GTAGAATGCT GCCTATCACC 240  
 TNCAGCACA TCCAGCGAA AAAGGGTGTG AAGNACCCAC CATGTTCTTG GAGCANTCAA 300  
 GGGTTNCTAA ATNNNNCGGC TGGGACCANT NANATAGTGA GTNNNNN 347

SEQ ID NO:5148

SEQUENCE LENGTH:388

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06151

SEQUENCE DESCRIPTION:

GATCTGCCAT ACCACTGTGA CTGCATTGAA AGATGTCCCT TTCTCTCTCT GCCAGTCGGT 60  
 CGGTGTGGGA CAAAACACAG ATATACAGCA GATAGCGGCC AAAAATTCA CAGACACCTC 120  
 TCTCATGTAC CCAGAGGACA CTTGTAAATC TGGACCAAGT ACGAATACAC AGAGTGGTCT 180  
 TTCAACACT CCTCCCCCTA CTCCACCGGA CCTCAACCAG GACTTCAGTG GATTTAGCT 240  
 TCTTAGTGGA TGTTGCACTC AAACGGGGCT GCAGAGATGG AGGCTTNAGG GNANANCTTT 300  
 ACAGNTTAAC CCNATTTTCA AGCANAAACA GTTCTCANGA AGTGTGATGA TTGNCCGGGG 360  
 TAGAAGGGAA AGAGATTGAA TTTGCTTN 388

SEQ ID NO:5149

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06152

SEQUENCE DESCRIPTION:

5 GATCTATAAT GGGATACATT GTCATCCTCT AGCAACTCCT ATATAGAAAAG TTTAACTGA 60  
 ATATGTTACA TATANGAATT AAATTCTTCT CAAATAATTC TTAACCTCAG TNATGAGCCT 120  
 AAATTTACTC TGCTTGGCTC TCTACACATG GCATTTCAGG GTATAAGATG TAGCATTNA 180  
 ATGTGTAAGA TATATGTACN NNNCATATGT GTTGCTATCN TCATCATTAA CATCCTTCTT 240  
 TNCTATTGCT TGGCTGTAAT TTTTGTAAG ATAAATTATA TTGNTNNNT GTATGTGTGT 300  
 10 TTGTAGTN 308

SEQ ID NO:5150

SEQUENCE LENGTH:316

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS06153

SEQUENCE DESCRIPTION:

20 GATCTGTCCT GTGAGGCATT TAGGGGCTTT CAGGAATTTA GTAAAAGGTG GAGTATGCCT 60  
 TTCCAGTATC TTCCATCTTC CTTTGTATAC TTGTCCTTCC TCCCATTTCC TCCCTTTGGC 120  
 CCGAGGTAGG AGGATGGAGG GAGGCTGCTA CTCTACCACT TCCTGTGTGC CTCTACTGTG 180  
 GCCTCAACCC TGGCAATTAT AGCTACTCCC ATCCCTTACC TGGGCATGTG TGAGCCCTTC 240  
 TCACTGGATT TTATACCCTT GTGTCTGTGT ACATAAATAT ATATACATAT ATATATACAT 300  
 25 AAAANCCTTG TACAAA 316

SEQ ID NO:5151

SEQUENCE LENGTH:66

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS06154

SEQUENCE DESCRIPTION:

35 GATCAGGCAG GAGAAAAACT TTAGATGGGA GTCTTGTCTAT CAAAAATAAA TACAGTTGCA 60  
 TGGAAA 66

SEQ ID NO:5152

SEQUENCE LENGTH:311

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS06155

SEQUENCE DESCRIPTION:

45 GATCAGGACA AGAGCGANGC ACCAGGGGAG CTCTCTCCCA AAGGCCTTGT CGCCCCAGAC 60  
 CTAACCTGCT CCCCTCAAC CTGECTGAGG AAGAACTCT CAGGATTGCA CGGATATTTT 120  
 CTCTCAGTA CTCCAGAAA GACTGACGCA GCCTGAGGGG CTGGGGTTGA AGGAGACACC 180  
 TGCCCANCN NCGTCAGNTT TGTCCAGCTT GCAGGAGGCA CCAGGTCTGG CTCCTTCAGG 240  
 GCTGTCACAG TCCTGAAACC ACCACTTGCC TAGGTCACGG ATGCCTNAAG AGACCCGGTN 300  
 50 AGGCTAGATN N 311

SEQ ID NO:5153

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EP 0 679 716 A1

SEQUENCE LENGTH:111  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
5 CLONE:HUMGS06156  
SEQUENCE DESCRIPTION:  
GATCTAGGGC TGGCCCTAG TGAGTGGGCT CGAGGGAGGG TTNCCTGGGA ACCCCAGGAA 60  
TTGACCCTGA GTTTTAAATT CGAAAATAAA GTGGGGCTGG GACACACGAA A 111

10 SEQ ID NO:5154  
SEQUENCE LENGTH:274  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
15 CLONE:HUMGS06157  
SEQUENCE DESCRIPTION:  
GATCTCCTNN TCCAGTGCTG CACACTCCTG TTTTGGAAAC TTAAATAGCG TTGCAACGAA 60  
ATCCTATATC CAGTTTCCTG TAATTTANTT GAAGAAAAAT ACATCCAAAT AAAGACTTTA 120  
20 TTATTAACAG ACCAGATAGC ATCAGAAATC ATGTGACTGT TNTGCTTATC AGANTATGTC 180  
TNAACNTTTT AGGGCAAAGT TAACACTGAA AGTTCTAGCT TAAGTGTTGA NCCTNTNGTG 240  
GGAAAAANAA TTCCACTTGT GAAACNTCAG GCTN 274

25 SEQ ID NO:5155  
SEQUENCE LENGTH:155  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06158  
30 SEQUENCE DESCRIPTION:  
GATCACTCTG GTGCGGGTGT TTGGTTTTGT TTTAAATAG CTTTGCACTG AAAGCTTTCA 60  
TGACCATACA AATNATCTTT TTTCTTCTTA TTTCTTGTA GAGGTTTTTT TCCTCCTTGT 120  
CTTAAGGTCA TAAAAATATT GTTATGTGGG ACAA 155

35 SEQ ID NO:5156  
SEQUENCE LENGTH:369  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
40 CLONE:HUMGS06159  
SEQUENCE DESCRIPTION:  
GATCTGTGGC TTTGCTCCAC CATCCCTAAC CAACCTCTCA TCACAGCTTT NTGTGTGGGC 60  
TGAGTGCTGG CCTTAACCCT AGGCGTGGAA GAGAAATGT GAGGTTGTTT AGATACTCAT 120  
45 CAGGACCTCA CAGGAGCTGA GACTTATCAG CCAGAAATNG TTCTTCGGAC AGTCGTACAC 180  
ATCTTACAGA AAACCTCCT TNGTAGAGTT GGNITGTGGT ATGTGTTTGA TGCTATAAAG 240  
CTCATTTTTA ATGGTGTACA CCTGNTTCTA GGGNCGATT CGTTTTGGAA GNGGGTAANG 300  
NTGCNTTAAC CAGGTAACNT ATCCTTGGGN TTTAAGGTGN AAAAAATNTT CTNGNCAAAAG 360  
50 GGAANCCNN 369

55 SEQ ID NO:5157

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06160

SEQUENCE DESCRIPTION:

GATCAAAATC AAAAGAACCG TGTAGATATA CTTNATTGTA TAAGTAGAAA ATTACTTAAT 60  
 TNCATACTAG AAATGGATGG ATGCTGCAAG TTGAAATGGA CTGTCCATTG ACGGTCCTAA 120  
 TGTGGTAGCA GAAAAANATG GTGTCTTAAG TNCTTAGNGT TTGATGTCAT TAACAGTTTC 180  
 GTAAACTCT ACAGTGTAGN AAGTTTTTTC AATACTAAAC TGTGCGTTGT NCATAGTTCT 240  
 AATGCATTGT NTTNGCCNCC CGGTACTTTC TNTNAANGN 279

SEQ ID NO:5158

SEQUENCE LENGTH:337

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06161

SEQUENCE DESCRIPTION:

GATCTCAAGT GAGATAGCAG AGCAAGATGC CAAAAGACCA TAAATAGAGT AAGGTTTCTA 60  
 TAGATGTNAG ACAGATTTGA GAGAGCATTT ACTCTGTCTC CCTGTGGATG AAAGTGTGTC 120  
 TGAAATGGTT CCAATTTTNA GGAATCTGCT TACCCNCTTC ATTATTGAC AGCTTTCCTT 180  
 GGTGACCCAA ACCTTGATAGC CTAAGCCATT TGTCTTTTTC TCAGTGGAGG GAGTGTATGG 240  
 ACCTGGCCCC ATGGCTTTGC ATGTTAGAGA CCTGGCNGAC TAAAGTCNCN GGGTGTTTGT 300  
 TTGCTCACAT TTGCTGAGTG ACAGNTATGG TGNCCNN 337

SEQ ID NO:5159

SEQUENCE LENGTH:378

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06163

SEQUENCE DESCRIPTION:

GATCTACAAC CCCTTGGAGC AGTGTGTNA CAATNACGCC ATCGTGTCCC TNAGCGAGAC 60  
 CCGCCAATGT GGTCCCCCCT GCACCTTCTG GCCCTGCTTT NAGCTCTGCT GTCTTNATTC 120  
 CTTTNGCCTC ACAAACGATT TTATTGTGAA GCTGAAGGTT CAGGGTGTGA ATTCCCAGTG 180  
 CCACTCATCT CCCATCTCCA GTAAATGTGA AAGCAGAAGA CGTTTTCCCT GAGAAGACAT 240  
 AGAAAGAAAA TCAACTTTTC ACTAAGGCAT CTNAGAAACA TAGGCTAAGG TAATATGTGT 300  
 ACCAGTAGAG AAGCTGAGG AATTTACAAA ATGNTGCAGC TCCAAGCCAT TTGTATGGCC 360  
 CATGTGGGAG ACTGNTGN 378

SEQ ID NO:5160

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06164

SEQUENCE DESCRIPTION:

GATCAGCCCC ACCCTGGCCT AGACCAGCAG ACAGAGCCAG GAGAGGCTCA GCTGCATTCC 60



GCAGCCCCCA CCCCCAAGGT TCTCCAACAT CACAGCCCAG CCCACCCACT GGGTAATAAA 120  
AGTGGTTTGT GGAAG 135

5 SEQ ID NO:5161  
SEQUENCE LENGTH:350  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS06165  
SEQUENCE DESCRIPTION:  
GATCTCGTAA GATTAATGT AGCATTCTAT ACTCCCTACA TGCACAGTAN GATTGTGTTA 60  
ATGAATGGAA GGAAAGACTA AATACAATGT CAAATGTNAC TATTAATTGG ACAAGAAAAT 120  
CCAAGTAGCA AATGACCATT ATGTGTAAGA CTTACTCTAA AAAGACCNTT TAAATAGCT 180  
15 CATATATTAA TNTNGTTTAA AACCTGCTAT TTTCCAAAAC TGCAAACTA GGGCTATAAA 240  
AATCTAAGTT AAAAAATCAG CTNATCCTCA TTGGTATAGT GGTNTGGNNA AAAAAATCCA 300  
GTTTAAACC NGNNTNNATT GANAGGNTGT CTCCATGCCT NCCATTGGGN 350

20 SEQ ID NO:5162  
SEQUENCE LENGTH:57  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06166  
25 SEQUENCE DESCRIPTION:  
GATCACTTTT ATGTAAAAAT TATAATTTAA TTAATAAAAA ATTTCTTAAG AAGTAA 57

30 SEQ ID NO:5163  
SEQUENCE LENGTH:203  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06167  
SEQUENCE DESCRIPTION:  
35 GATCAGGCCT TGGCCTCTNA GCCCTGCCTG CTCTGGGCCA TGCAGAGGAA GGACAGAGNG 60  
TGGGCGCAGG GCACCAACTC AGGGACATCC CCTCTCCTGG GCGACGTCAG TGGACCTTCC 120  
TGCACCCCCA GCCTGGAATG TAAATNAGCT GTGTGGTGCC CGCGTNGCTG GAAGGAAATA 180  
40 GACCCTTTN TAGCTCCCTG AAA 203

45 SEQ ID NO:5164  
SEQUENCE LENGTH:274  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06168  
SEQUENCE DESCRIPTION:  
GATCCTCTGT GATACCAAAA TCCATGGATG CTAAAGTCCC TTTTAAAAA TGGCATAGTA 60  
50 TTTGCATATA ACCCAAACAC ACCCTCCTGT GTATTTTAAA TCATCTGTAG ATTACTTATA 120  
ATACATAATG TAATGTAAAT GCTATAAAN TAGTTATTAG ACTGTATTTA GGAATAATG 180  
ACAAGANGAA AAAGTCTGTA CATGTTCACT ACAGAGGCAA CCTTTGTAGG TCTAAATANN 240

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TTTTTAATAC AGNANTNNGG ATGTNAGNNN NGGN

274

SEQ ID NO:5165

SEQUENCE LENGTH:343

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06169

SEQUENCE DESCRIPTION:

GATCTCTTTT TATTTAAATG TGAATTTCAA CTTTGTGACAA TCAAAGAAAA GACTTTTGTT 60  
 GAAATAGCTT TACTGTTTCT CAAGTGTTTT GGAGAAAAAA ATCAACCCTG CAATCACTTT 120  
 TTGGAATTGT CTTGATTTT CGGCAGTTCA AGCTATATCG AATATAGTTC TGTGTAGAGA 180  
 ATGTCAGTGT AGTTTGTAGT GTATACATGT GTGGGTGCTG ATAATNGTGT ATGTCCTTTG 240  
 GGGGTGGAAA NGGATAACAA TTCAAGCTGA GAAANGTATT CTCAAAGATG CATTTTATA 300  
 ANTNTNATTA ANCAATNTTG TNANAGNNNG ANGNGTGGGN NTN 343

SEQ ID NO:5166

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06170

SEQUENCE DESCRIPTION:

GATCATACGA GGCATGTAAT ACCAAGAATT GTTACTTTAC AATGTTCCCT TAAGCAAAAT 60  
 TGAATTTCTT TTGAACTTT AGTNATGCAC AGACTNATAA TAAACCCTCT AAANCCTGCC 120  
 CAAA 124

SEQ ID NO:5167

SEQUENCE LENGTH:367

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06171

SEQUENCE DESCRIPTION:

GATCTTGGAC CCAGTCTGGC CCGTGCCAG CATGGGGCTG CTTCTCCTCC ACAGCTCCTT 60  
 CCCAGAGGGC TGGGGCCTCA GCCTCCCTGC CACGTCCACT CTGGGCTGGC CTGGAACATA 120  
 CTACTATGTT GACAGTAACA ATAAAGCTCC TCAGGGACCA CCGTACAGGC CCGCAGCCCC 180  
 ACTGNCTGCT GTTGGGAAGAA AGCTGTGGAA AGAAAGCAGG GGGNCCCTGC CCCAGGCCAA 240  
 GGCCCTGCCC TTGCCACACA CGGTACACAN ATGCAGCCTC TCTNTCTCTN TGTGTCCACT 300  
 TGTGAAAATA ANCTGCAGGN CTGGNTNGGA CAACAAAGGN AGNNGNACAG TGTCTNGGNN 360  
 GGCANN 367

SEQ ID NO:5168

SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06172

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCAGTTCA GTATATTGCA CTAATTATTT TAGGTATTTT CATTATATGA AAGCTACCAT 60  
 GTGTCAGAGA TGATTTAATC TATTTAAGTG TTGGACTGCT AGGAGAACTT GTACATTAT 120  
 GATAATGCAG AATTAGGAAA ACGGTTACCC AGTGTTTAGT TTTATATTGA GGTGCTCAGG 180  
 TTGGTATAAA GTGGTATAAA AAGCAAA 207

10 SEQ ID NO:5169  
 SEQUENCE LENGTH:116  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06173  
 SEQUENCE DESCRIPTION:  
 15 GATCATGCC TTTGTAGTAN CACAAATGGN GCTGGAGACC ATTATATTAA GCAAACTAAC 60  
 ACAGTNCCAG ANAACCAAAT ACAGTATGTT CTCACCTATA AATGGGAACT AAAGNN 116

20 SEQ ID NO:5170  
 SEQUENCE LENGTH:92  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06174  
 SEQUENCE DESCRIPTION:  
 25 GATCTGCTAG GGATTGTCAA AATAATCTCC TTGAGGCATC TTTATTTTAA AAATGAGATT 60  
 AAAGTATGTG ATTTGCTTGT TATGTGGCTA AA 92

30 SEQ ID NO:5171  
 SEQUENCE LENGTH:120  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06175  
 SEQUENCE DESCRIPTION:  
 35 GATCANCAGA AAAGGCAAAT TTCACCTGNC TAAACACTTT CAATTTTCAG TTNTAATTTT 60  
 ATNTTCTATA TACCCAGTCA TAAAGTATAA GCATCAGTTG TCATTAAAAG TTTTCAGAAA 120

40 SEQ ID NO:5172  
 SEQUENCE LENGTH:102  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06176  
 SEQUENCE DESCRIPTION:  
 45 GATCTGTAAT GAAAAGAATC TGNTACTGCA AGTAAACCT ACTCCCCAAA AATGTGTGGC 60  
 TTTGGGTCTG CATTAAACGC TGTAGTCCNN GTTCATGCCA AA 102

50 SEQ ID NO:5173  
 SEQUENCE LENGTH:171  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS06177

SEQUENCE DESCRIPTION:

GATCACTTNT NGTCTGATTC CAGCCTGCTT GCAACCCTGG GNTCCTCTTG TTCCCTGCTG 60  
 NCCTGCCCCCT TGGGAAGGGG CAGTGATGGC TTTGAGGGGA AGGAGGAGAC CCTCTTTCTC 120  
 CCATGCTGCA CTTACTCCTT TTGCTAATAA AAGNGTNTNT AGATTGTCAA A 171

SEQ ID NO:5174

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06179

SEQUENCE DESCRIPTION:

GATCTAAACT GTATTGNCCA ATTTAAATAA AAAATNNAAT ATAGATTCAG AAAGGTTTAT 60  
 ATTTTCTTAA TGACTTCATT CTATATTATN TTGTTAGGTT GCATAAAGAA GCAAGGAATT 120  
 GTACTTGTAT TAAAAGATGA AGAAAGCTAT TAGGTATATT TGTACATGNC TGCANNTGTG 180  
 TCTATNNN 188

SEQ ID NO:5175

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06180

SEQUENCE DESCRIPTION:

GATCTTGAGA GGTGGAGGTT GCAGTGAGCC AAGATTGTGC CACTGNCTTC CAGCCTGGGA 60  
 GACAGCAAA 69

SEQ ID NO:5176

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06181

SEQUENCE DESCRIPTION:

GATCTGTATA TATGTAACAT ATTAATGGGT AACTTGCTGT GTAAAATTAT AAGCCATATT 60  
 TTTAAAGGTT TTTAAATAC TTATTGTGCT CCATTGTGA TATAATTNCT AACATTCTG 120  
 CTCTGTGANN NNNN 134

SEQ ID NO:5177

SEQUENCE LENGTH:59

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06182

SEQUENCE DESCRIPTION:

GATCTTNGAG ATTGTTCCAC ATCAGTACAT AAAGTACATA AAGATTGTCA CCCCACAAA 59

SEQ ID NO:5178

EP 0 679 716 A1

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06183

SEQUENCE DESCRIPTION:

GATCTGTCTA CTTNNCTTAT CCTGATTCAA ATGGAATGCC AGTATGGAAC TCCTAGGATT 60  
TGTCACGAAT GGGGAAGCCAA GTGCCATCTT CAAAATTTCA GGTCTTAAAC NTGGAGAAGG 120  
AAGCCAACAT CCTTTGGAG CCATGAATNT TGTCCGAACT CCANNNTGTT GCTCAGANTG 180  
GANTTTCAGT GGN 193

SEQ ID NO:5179

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06184

SEQUENCE DESCRIPTION:

GATCATTATT TGGNAATATG TCCTATGGAA AGAATAAAAG CATGTNCTTC ACAGCTAGCA 60  
TGTTACAGA TTTGAAAGAA GTTTCATTAA AAGCACCATT GCTTCAAA 109

SEQ ID NO:5180

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06185

SEQUENCE DESCRIPTION:

GATCTTAATT TAAATAGGTG CTTTAATTTT ACAGCTTTCA AAAGTAGTTA CTGTAAATTT 60  
TACTCCTGTT AATGCTGGAT TGGTTTAAAG GATTTATAAG GGCTGTGTTT NCTCNTACA 120  
AGGCAAGATG CCATACAGNG TTCANTAATA GAAGGTCTNG ATACAACCGA CATTTTAAAT 180  
ATTCTNTATA CATNGGACT GCGTCTTTTT CACTGACCCT ATGANTTCAC TGTGGAGTAG 240  
GGTGAAGTGG NCTGCANATT AGTTTATTTG TTGCCATAAT CACATTNNNG AAAAGAN 297

SEQ ID NO:5181

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06186

SEQUENCE DESCRIPTION:

GATCTNATTG CTTATAAACT TTGGTGACGG TAGTGTGTAA GGCCGTATTT NNAGCATCTN 60  
ACAGGTGTTT AAAAAAAGT GGTGTGCGCA CTGGGAAGTG GAGTGATGGC CTCGTCTCCA 120  
GTGCTCCTCT GGGCTCTTGA GTTGCTGCTT GANTTGCCGT GTAGACATTT NCTTGGAGAG 180  
TCCACTTGTN ATTTGACGGA GGTAGGTTTC AACCCAGAGT TAATGTCAAG CATGCTAATT 240  
TANCTAGTCA CTCACAGATG ACTTTCCTTT AATAAAAGTC CCTTTCCCT AAAANAAAAA 300  
A 301

SEQ ID NO:5182

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06187

SEQUENCE DESCRIPTION:

GATCTTTGGG CAAGTCACTT AACCTCTCTT TNCCTCAATT TCCTCATCTT GAAATGAGGA 60  
 TAATAATACC TGCTGTACCT ACCTCACAGG GCTGTTGTGA GGATTAAATG AGNTGGCATG 120  
 TGAAAGCACT TTGAAAATTG TAAAGCGCTA TGTAAATGTA AGGTATTATA GAANCATCTT 180  
 TAACATATAG TTTCATACCA TTCATTTTTT ACCAAAGAAA GGGAAAGTNT GCTNGTANGC 240  
 TGGTTGAAAA AGTTANNCTT GGTATAANNT TNGGTTTGGT TGANGNANAA GGN 293

SEQ ID NO:5183

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06188

SEQUENCE DESCRIPTION:

GATCACAAAA GTATATAAAA AGTCTACTAG AGCAACATTT TCCCATATTT TTNGGTTCTC 60  
 AAAGCAACTT ATGTATGNTT TAGAGANGNC AAAAGAGGAA GCCTAGGGGG AAAAGAAAAGA 120  
 NAATTAGAAT TTGCAAAATNC TAGAAAANN 149

SEQ ID NO:5184

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06189

SEQUENCE DESCRIPTION:

GATCGAAAAG AAATTTNTTT ATACTTGATG CCTTAAGATN CCCAAAGCTG CCCAAAGCTC 60  
 TGAAAGACTT TAAGATAGGC AGTAATGCTT ACTACAATAC TACTGANTTT TTNTAGAGTT 120  
 AACATTTGAT AATAAAACTT GCCTGTTTAA TCTCAA 157

SEQ ID NO:5185

SEQUENCE LENGTH:62

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06190

SEQUENCE DESCRIPTION:

GATCTTGCCCT GGAAGGTGTT TTAAGTTTTN TAATAAACAA GATGATGTCT GAAAAINTGA 60  
 AA 62

SEQ ID NO:5186

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06191

## SEQUENCE DESCRIPTION:

GATCTAGAGC AGCATGGAGC TGTGGTAGA ATATTAGTTT TTAACCATAC ATTGTCCCAA 60  
 AAGTGTCTNT GCATTGTGCA AAANGTAAAC TTAGGAACAT TTNGGTATTA AAAGGATTAT 120  
 TTTAATTGNN AAAAGCCNGA NGCGN 145

SEQ ID NO:5187

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06192

## SEQUENCE DESCRIPTION:

GATCAACAGC TCCGCCTACC GCAAAGCATT TGANAGCAGA CTAGCCANCA GTNGTGCTCT 60  
 GAGAGTGAAC GNGCACCTCC AGGTNGAGGG CCACAGCAAC GTN 103

SEQ ID NO:5188

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06195

## SEQUENCE DESCRIPTION:

GATCTGATAG AGGGGGAGGC AGAAGCAGAT ACTAGAAACA AACAAAACCTT TGGACCAAAA 60  
 TCCCAGTTCA AAGAAACAAA AAAAAGAGTG GAAACTATTC TATCATAACT ACCCAAGGAC 120  
 TACTAAAAGG ANAAATTGTG TTACCTTTTT TAAATTCCTT GTTAAGTCCC TTCCGTAATT 180  
 TTNATGTTCT TGTGAGGANA AAAGTAAANC ATGTTTANTT TTAANNAAGG NGANAGNGGG 240  
 NGTNTAGN 248

SEQ ID NO:5189

SEQUENCE LENGTH:354

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06196

## SEQUENCE DESCRIPTION:

GATCTCTTAT ACAGACGCAC CAAAGCCCTC ATTGACTATG AGAACTCAA CAAAGCTCTG 60  
 GATAAGGCCC GGTTAAAGAG CAAAGACGTC AAGTTGGCTG AGGCACACCA GCAGGAGTGC 120  
 TGCCAGAAAT TTGAACAACT TTCCGAATCT GCAAAAGAAG AACTGATAAA TTTCAAACGG 180  
 AAGAGAGTGG CAGCATTAG AAAGAATCTA ATTGAAATGT CTGAACTGGA AATAAACAT 240  
 GCCAGGNACA ATGTCTCCCT TTTCAGNGC TGGTNTTGAC TTGTTCAAGA GTAAGTGGTT 300  
 ATGCCTTCAC TCNGTAGGAA NNGGAGTTGA ATTGTTGTAA GGAAGCCNAN GTGN 354

SEQ ID NO:5190

SEQUENCE LENGTH:77

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06197

## SEQUENCE DESCRIPTION:

GATCTCTATT TTAAACTAG CTTTTAAGC AGCTGIATGA AATAAATNCT GAGTGAGCCC 60  
CAGCCCGCCC CTGCAAA 77

5

SEQ ID NO:5191  
SEQUENCE LENGTH:257  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

10

CLONE:HUMGS06198

SEQUENCE DESCRIPTION:

15

GATCTAGCTT CANAGGAAGT CTACACCCCA TTCCCTTCTG CTTACAATGT ACCCATGATA 60  
TGTGTTTAGC ACAGTAATAC TGTAACAGGA CATCACATGG AAAAATCAAA GCAGCTGGCT 120  
CACTGTATTT AACTGAAAAG AATGCCTACA GATTGGATAT TTNGTAGGGG NAATTAAGGC 180  
ACTTTNNTAA CAAACTTCAT TNTGTGAAAC TNGGTTGAAT ATTAACATAC AATTNNGNCG 240  
GGNNTATTAA TGCCATN 257

20

SEQ ID NO:5192  
SEQUENCE LENGTH:185  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06199

25

SEQUENCE DESCRIPTION:

GATCCACGGC TGCCCTGGAC TTAGACCAGT GTCTGAGGTG GTAACAGCGG CCGCACAGGG 60  
TTGGCCTAGA CCTNGGATTT GTGGGGAAAG CTGCTGGTGT GACCANCTGA GCACCCAGCC 120  
AGGAGACCTG CAGCCCTNCG NCTTCCAGAA GCAGGTCCCA AATAAGNCA GTGCCNACCT 180  
NCAAA 185

30

SEQ ID NO:5193  
SEQUENCE LENGTH:60  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

35

CLONE:HUMGS06200

SEQUENCE DESCRIPTION:

GATCTGTATA TAACTTTAAT TTAAAGGACC ATAATCAACT TTGTAATATT CTNATATAAA 60

40

SEQ ID NO:5194  
SEQUENCE LENGTH:286  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

45

CLONE:HUMGS06201

SEQUENCE DESCRIPTION:

50

GATCACCTC TACGGGAGAA CCAAGGAGCT GACTTCGGAA CTAAAGGAGA ACTTCATCCG 60  
CTTCTCCAAA TCTNTGGGCC TCCCTGAAAA CCACATCGTC TTCCCTGTCC CAATCGACCA 120  
GTGTATCGAC GGCTGAGTGC ACAGGTGCCG CCAGCTGCCG NACCAGCCCG AACACCATTG 180  
AGGGAGCTGG GAGACCCTCC CCACAGTGCC ACCCATGCAG CTGCTCCCA GGNACCCNG 240  
NTGATGGAGC CCCACCTTGT NTGCTAAATA AACATNTGCC CTCAAA 286

55



5 SEQ ID NO:5195  
 SEQUENCE LENGTH:138  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06202  
 SEQUENCE DESCRIPTION:  
 10 GATCTCTTGT TCTCTCCTGA GTGTCTTCT ACTNTGCTGA GNGCTTTCT GCTGTCCTTA 60  
 TCCTGTTCTC TTATCTNAT CCCCTCCAGT CTCTGCCTAA TTTNAGTGT TTAATAACAA 120  
 CCGNATGTCT AGTAAATN 138

15 SEQ ID NO:5196  
 SEQUENCE LENGTH:96  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06203  
 SEQUENCE DESCRIPTION:  
 20 GATCAAGAAC TTGGAACCGC AGAAAACGAA ATCCCATAGT AGCACAAAGC TTGGCTGTTT 60  
 AGTGAATAAC ATTTAAATAA TCGTAAANTA CAGAAA 96

25 SEQ ID NO:5197  
 SEQUENCE LENGTH:222  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06204  
 SEQUENCE DESCRIPTION:  
 30 GATCTTGCAG CTTTATTGA GTATTGTTC TTTTGTGTAG TTTCCATCTT TAAAAATATT 60  
 TAAAAATATT TCAAGATAAA GTATTATCTT CTCTGCAAAA ATTCCTGGAG TAATTNCTC 120  
 TCATAATATT TGAGGTCAGT GGTTCCTCAGT TGTATTAGTG GGGTAACTAC ATCAAAGTAA 180  
 ATAANGTCTT ATTTTNANA TGCAAAATTT AGACCATAGA AA 222

35 SEQ ID NO:5198  
 SEQUENCE LENGTH:53  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 40 CLONE:HUMGS06205  
 SEQUENCE DESCRIPTION:  
 GATCAAGTGA ACCATCCCTA GTCTTCCCTC AATAAATAAC TTTTAACTCC AAA 53

45 SEQ ID NO:5199  
 SEQUENCE LENGTH:239  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06206  
 50 SEQUENCE DESCRIPTION:

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GATCANAGTG AACCTCAGT TTGTACAAAA GAGTATGGGC TCACAAGANG ATGATTCAGG 60  
 AAACAAACCA TCCAGTTATT CTTGAAACTA ACATCCATCC TGAGCTAAAC NAGAGAAACT 120  
 ACCATCTTGG CCAGTGNCAN GTGTTCCGGAG GGCAGCAGAG NGGACCAAGC CTGTGTCACC 180  
 TGGNGACTAA GAANTTAAAGT TTTGTNTTGA CATATTCAGT CCTGTGTGCT TNCAGNAAN 239

SEQ ID NO:5200

SEQUENCE LENGTH:233

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06207

SEQUENCE DESCRIPTION:

GATCGAATAC GTGGATGNGA CGGGCCGGAA ACTCACACCC AAGGAGGCTT TCCGGCAGCT 60  
 GTCGCACCGN TTCCATGGCA AGGGCTCAGG CAAGATGAAG ACAGAGCGGC NGATGAAGAN 120  
 GCTGGACGAG GAGGCGCTCC TNAAGAAGAT GAGCTCCAGC GACAGCGCCC TNGGCACCGT 180  
 GGCCCTGCTC CAGGNGAAGC AGAANGCTCA GANNGACCCC NTACATCGTG CTN 233

SEQ ID NO:5201

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06208

SEQUENCE DESCRIPTION:

GATCAAAAAG GGGTTGATTA CAAGGGCAGG AAGGAATTGT TAGTGTGATT CTACAGTTCT 60  
 GCATCTTGNT TATGGTATGA CTGTGCGTTT GTCAAACCTT AACAGGATGA ATTTGCTGA 120  
 ATGTAAATC ATACTTCAAT AAACATGACT TAAAAACTT AAA 163

SEQ ID NO:5202

SEQUENCE LENGTH:319

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06209

SEQUENCE DESCRIPTION:

GATCAGTTTA TGTGTAATAT TCTAGTGCTT TAATGACTCT TTTTTCITT GGAGGGAGGG 60  
 TAACATTATT TGGACAGATG CAGAAGGAAC TGTTAGTGAG TCAAGACAAA CACATCTGAA 120  
 ATAAAGGAAC TGTGTATTAA CATGTTAACA ATTCATAACT GCACTTTTTA TGACATTTTG 180  
 AAAATCTATT TATAGGTACA GANCAATGGG TTTTGTTAAN CTGTATCACA TTTATNCTTG 240  
 CAGAAATTIA TTNCATTGTT ATTAGTAGGA ATTTTNTTGG TTCAATAAAA TTGGCAAAAN 300  
 CTGGGAAAAA NAAANNTTN 319

SEQ ID NO:5203

SEQUENCE LENGTH:82

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06210

SEQUENCE DESCRIPTION:

GATCTGTCTA GTTCCCATTC TCTGTTCAAC CTCAGTGNTT CAAAAGTTC TAATAAATAA 60  
 ACTCATTGA GTTGAACCTA AA 82

5 SEQ ID NO:5204  
 SEQUENCE LENGTH:145  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06211  
 10 SEQUENCE DESCRIPTION:  
 GATCAAGAAA GAAGCTATCT GGGANCANTG TAGCANTTAC GTCAGACCAG GACACTTCCT 60  
 GTTTACAGGA GACTATAAAA CCTTTGTCCT ATCATCACTT GATGTGGACG NCATTTTAGG 120  
 CCTCAGCCCG CCTGCACCCA GNNNN 145

15 SEQ ID NO:5205  
 SEQUENCE LENGTH:295  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 20 CLONE:HUMGS06213  
 SEQUENCE DESCRIPTION:  
 GATCAGAAGC ACCTCTTCTT TTATAGAAGT TGATGGATGG TTCATTCCAT TCTGCTACCA 60  
 AGAAGTGCAAT GCTGCTGCAG CGACACCTCA TTGCAACCTA TTATGAGAGA GTAAACACA 120  
 25 CACTCAGTGA CATTTAGCC TGCTCTCAAG NCCCAATTTT TATTCCATCA TTAATAAAT 180  
 CCAGTAACT TNCAATTTG GAAACCANAA ACTAAGGCAT ACCTGGCTTA GATTCTTTCA 240  
 GAATTTTCTG NTCTTTTGTG CGTAAATTNA AAAATAATTT GTGGCAGGGN TTAAT 295

30 SEQ ID NO:5206  
 SEQUENCE LENGTH:87  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06215  
 35 SEQUENCE DESCRIPTION:  
 GATCTTTAAA ATNAAGTGTA CGCTTATAAT ACAAGTAATG CTTGTGTATT TCTCACTTTA 60  
 GGAAATAAAA TATTTGCCAA TTTGAAA 87

40 SEQ ID NO:5207  
 SEQUENCE LENGTH:165  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06216  
 45 SEQUENCE DESCRIPTION:  
 GATCCTCCCA TCTCAGCCTC TCGAGTAGCT NGGACCACAG TTGTGTGCCA CCACACTTGG 60  
 GCTAACTTTT TAATTNTTT GCGGAGACGG TATTGCTATG TTGCAAGGN TGNTTACATG 120  
 CCAGTACAAT TTATAATANA CACTCATTTT NCCTNCCGTC TGAAT 165

50 SEQ ID NO:5208

55

SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06217

SEQUENCE DESCRIPTION:

GATCTTCTTC AGAAGCTTCA AGTCTCANCT GCATTAAAGC TCTCCATTGA ACCCGNTCAC 60  
AAAAGTACAA GCTTAAAGGG GCTAAAATCC ATTAATACAT NCCATNTTAT ANCCCN 116

SEQ ID NO:5209

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06218

SEQUENCE DESCRIPTION:

GATCCCGTGN ACCGAGTACA CGACCCAGGT ATGTACCAAG TAGGCACCCT TGGGCGCACC 60  
CACTGGGGCC AAGGGTCGGG GGAGTGTTGG GAGCCTCCTN CCCACCNNAC CTNCCTN 117

SEQ ID NO:5210

SEQUENCE LENGTH:181

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06219

SEQUENCE DESCRIPTION:

GATCAGCCAC TTGCTGACCC TGGTTCTTAA GGACACATGA CATTAGTCCA ATCTTTCAAA 60  
ATCTTGCTTT AGGGCTTGTG AGGAATCAGA ACTAACCAG GACTCAGTCC TGCTTCTTTT 120  
GCCTCGAGTG ATTTTCTCT GTNTTTCACT AAATAAGCAA ATGAAAATC TCTCCATTAA 180  
A 181

SEQ ID NO:5211

SEQUENCE LENGTH:344

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06220

SEQUENCE DESCRIPTION:

GATCANAACC AGTTTGTAGA TTTCTTTGTT CCTTCTCCAT TCCCACTGCT TCACTTGCCT 60  
AGTCTTGAAG NAAAAAACA AAAACAAAA AAAACCTTGT TCCTTTATAG GTTCCTGGTA 120  
GAATCAGTAG AGATGATTTC AGCTCATTGA CATTITTTTA AGCTATATCC CCTTGTCAAT 180  
CCATTGAGAA AGCTGACAAC TGGGATAGGG AGGGGATTGG ATAATAGATG GGGTCAAATT 240  
CTGTGTGAAT GTGAACCTTG CTAGTAAGCA CTTTGGTCTG TGGTTCAC TN CTGCGGTTAG 300  
NGGAAATCTA TCTCCCTAT CTTNGGTGCC TTGAACTACA GCNN 344

SEQ ID NO:5212

SEQUENCE LENGTH:139

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06221

SEQUENCE DESCRIPTION:

5 GATCACATAA CTAGGAAGTG GCAGAACTGA TTCTCCAGCC CTGGTAGCAT TTGCTCAGAG 60  
 CCTACGCTTG GTCCAGAACA TCAAACCTCCA AACCCCTGGGG ACAACGACA TGAATAAAT 120  
 GTATTTTAAA ACATCTAAA 139

SEQ ID NO:5213

SEQUENCE LENGTH:179

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06222

SEQUENCE DESCRIPTION:

15 GATCGTAAAC CATTATCCTT TAAAGGTNTA TTTGAAGATG CTGTTAAAGT ACAGAATTTT 60  
 GTGTACAGGT AGATTTTNCCT GTCCCTCATT AATAGTGCCT TCTTAATTAA TACAGACTGG 120  
 TGTTAGCTAT AACAAAACCT CAGTANNGGG GGGTGNATCC CAAGTNCCTT GTGGCNANN 179

SEQ ID NO:5214

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06224

SEQUENCE DESCRIPTION:

25 GATCAAAATG TTCTGGAATT AGATGTGATG TTTGCACAAC TCTGTGAATG TACTAAGAAC 60  
 CACTGAATTG TATATTTTAA AAGCATGGTA TGTGAATAAT ACCTGAATAA AGCTGTTATA 120  
 AAAAATAAA 129

SEQ ID NO:5215

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06225

SEQUENCE DESCRIPTION:

35 GATCTTCAAG CATAGNNTTG CATATTTTAA CATCTGAAAT CAGAAAGTGT CTTNCTGGG 60  
 AGTNTGGTTT TAGAAACATG AAATAGTACT GTATGTTAAA ATCGATGGCA GTGTTGCCTC 120  
 GATGATATNT N 131

SEQ ID NO:5216

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06226

SEQUENCE DESCRIPTION:

45 GATCTTTGAG CGGGACCTGA AGAAGAAGGG GCCCGAGCCG GTGCCACTGG AGTTTATCCC 60  
 AGCCAGGGG CTGCTGGGAC GGCCGGGTGA ACTCTGTGCC CAGCACTTCA CGCTCAGCTG 120  
 ACCCTGGCCC ACCTGTNAAT AAATCTCAGC TGACCCAGC CCACCTGTNA ATAAATNTT 180

TTGCAGGAAA

190

SEQ ID NO:5217

SEQUENCE LENGTH:323

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06227

SEQUENCE DESCRIPTION:

GATCCCTGGT CTTCACTG TAGCAGCCAA AAGGAACAAG CTGAAANTGG ATACCTAATG 60  
 TAAGTGGAGT CTTCTAAGTG TTTCCTGGAA GAAGTCGGGT CCCAGGCTCN AGTTGCTGGT 120  
 TCTNACATGC CACCATCCAC AGTCCTTCAG CAGATTNATT CAGTGGCTAA TGCTGATATC 180  
 ATAAATGCGG CAAAGAAGTT TTTTCTGGC CAGANGTCAN TGGCAGCAAG TGGAAATTTG 240  
 GGNATNCAC CTTTTGTTG ATGAGTTGTA ATACTGNNGC GCNCATTACC AGGTGAGAGC 300  
 TGGANCGTNT TTTCAGNCCN TGN 323

SEQ ID NO:5218

SEQUENCE LENGTH:225

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06228

SEQUENCE DESCRIPTION:

GATCAAGTT CAAATTAATT TTAAGTTAGC TAATNAACTC ATCACCAGGA CAGTTGGAGG 60  
 GGGTAGGCCG AGGTTAAATG GTCCACGTTT CAAAAATGTT AATGGCTAAT CCATAATTAA 120  
 AGAAGGTTTA ACTGTTACTG AAGTTTACAA GTTTTATTGT CATGNACATG AANTACAAAC 180  
 ACGATGGCTT CGAAATGTCT TTCAATAANT GTTCTGTCAT TAAA 225

SEQ ID NO:5219

SEQUENCE LENGTH:317

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06229

SEQUENCE DESCRIPTION:

GATCTCATTC TCACCTCAGA AACCATTTAC AACCCAGATT ATNATAGTAA TTTGCACCAG 60  
 ACTTTCCTTA GACTGTAAAG TAAAAATGGA CGTGTACTTT TGGCCAGCAA AGCACATTAT 120  
 TTTGGTGTAG GTGGAGGTGT TCATCTCTTT CAGAAAGTTG TAGAAGAAAG AGATGTTTTT 180  
 AAGACCAGAA TACTCAAAAT AATTGATGAA GGATTGNNGA GGTTCATAAT TGNAATAACT 240  
 TTTAAGTTTC CTGGNTTANT TAACATTCAC TTGNGTGTCC ANAATTGGNG ATAGACNGNN 300  
 AGGCACANGN TGTCNTN 317

SEQ ID NO:5220

SEQUENCE LENGTH:51

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06230

SEQUENCE DESCRIPTION:

GATCATATAC AGTTCCTTT TAAAAAGCA ATAAATNCTT GGAATTAGAA A 51

SEQ ID NO:5221

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06232

SEQUENCE DESCRIPTION:

GATCAAGAAT GTTCCCAA GTTNTGAATA GAGTGTACA ATGTATCAA GANTTGTGAA 60  
GCAATGATTC TTACAATAC AATAAGTTT AATTATTTAC AAA 103

SEQ ID NO:5222

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06233

SEQUENCE DESCRIPTION:

GATCTCACAG ATGTNTGGAA TTCAAAAAG CCAAATCAC AGAAGCAGAG TAGGATGGTG 60  
GTTGCCAGGG CCTGGGACGT GGGGGAAATA GGGAGATGTT TGGTGTCTGT TAGGAAGAAT 120  
GAATAAGCTC TGGAGAGCTA ATGTACAGCA TAGTGACTNN NGNTAATAGA ACCGTATTAT 180  
ATACTTGANA TTTGTGAAGA GAGTAGATGT TAANNNNN 218

SEQ ID NO:5223

SEQUENCE LENGTH:87

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06234

SEQUENCE DESCRIPTION:

GATCTGTAC TTACTTCTGT GTGACCTTG AAAGGCTACT TATTCCTCT CTTAGCTTTC 60  
TCATTAAAT CAATGAACAA TGCCAAA 87

SEQ ID NO:5224

SEQUENCE LENGTH:202

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06235

SEQUENCE DESCRIPTION:

GATCTCAGGC TGAGCAAAAT NAAACCTTGA TGTTACGGGC TAAATCAAGA GCAGCTTAAT 60  
CCTGTTTACA ATGTGAGCTT TTTGTGCGTC TGTGAAATGT TTTACAGTGT TTCTCATCAT 120  
CTGTTTCCCA GCAAGGTCTT TNNTTTTNCN ACATTGAAGT NCTGNCTATG TATCTNAATC 180  
ACAAATGGNT TCATTCACN TN 202

SEQ ID NO:5225

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06236

SEQUENCE DESCRIPTION:

5 GATCACAAGC GTATCCATNG TGAGGTTCCG TGGATGGAAG CTNATGGATN TNCCTTCCTG 60  
 ATGTTTCATCT GCCACCTTGC TATTNAATGC ATCCTGTTA TAACTGTCTT CTAAATATTG 120  
 AATAGAAATA AAGCATTGTG ACAGTAAA 148

SEQ ID NO:5226

10 SEQUENCE LENGTH:370

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06237

15 SEQUENCE DESCRIPTION:

GATCGAAATT GCGGGCTATG GCGCCGAAAGT TTTTCGTNAG TACTGGGATA TCCCCGATGG 60  
 CACCGATTGC NACCGCAAAG CCTACAGCAC CACCAGTATT GCCAGCGTCG CTGACTGACC 120  
 GCCGCTGCCT ACAGAGTCAC ACTCAATCCT CCGGGCACCT TCCTTGAAGG AGTGGCTAAG 180  
 GTTGGACAAT ACACGTTTAC TGCAGCTGCT GTCGGGGCCG TGTTCGNCCT NACCACCTGN 240  
 20 ATCAGCGTCC ATNTCCGTNA GAAGCCCGGA CGANCNCNTG AACTACTTNN CTCGGTGGCT 300  
 TTCGCCGGAG GCTTNACTTT TGGGGGNANG GACGTACAAT NTACGGGGTT TGGGGCCGCC 360  
 GNNTTTGGTN 370

25 SEQ ID NO:5227

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06238

30 SEQUENCE DESCRIPTION:

GATCTGTGTG AAGAATGGTA ATNACGTAGT TGNAAGGAA AATGTACTGT TGTGTGTTTC 60  
 ATTTGTGTGA TTTCGTACCA AAAAAATGTG TTTGAACTAT ATTGTATGTA ATTTGGAAGT 120  
 CGTGTTAATA AAACCCTGCA GTTTCCTAAA 149

35 SEQ ID NO:5228

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS06240

SEQUENCE DESCRIPTION:

GATCAGGCTT TGAAGGCTGG ATTCTATCTA CATAAGTCN TTCAATTCCA CCATGGGNCA 60  
 GAGCAGCTCC ACCACGTGTG CACTTAGCCA TNGNTGGCAA CAGAAACCAA GAGACACANN 120  
 45 TACGCAGGN 129

SEQ ID NO:5229

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

50 TOPOLOGY:linear

55



EP 0 679 716 A1

CLONE:HUMGS06241

SEQUENCE DESCRIPTION:

GATCATTAG GAAAAATAAT TCTATTTTA GCTTTTCATT TCTCAGCTGT CCTNTTTCT 60  
NNTTTGATTT TTGACAGCAA TGGAGAATGG GNTATATAAA GACTNCCN 108

SEQ ID NO:5230

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06243

SEQUENCE DESCRIPTION:

GATCAAGAGT TGTCATGCTA GGGAGACTAT TCTGCCTAAA ATTCTGGGGN ACTATTTTGT 60  
GTTTAAGNAT ACTATGTATA TTAAGAAGGT ACATATTGA AA 102

SEQ ID NO:5231

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06244

SEQUENCE DESCRIPTION:

GATCTTAAAA GTGTTATTTT TGCTTTTATT TTTTAAAAAA GGNNGAGGNT TATTGGCAAA 60

SEQ ID NO:5232

SEQUENCE LENGTH:76

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06246

SEQUENCE DESCRIPTION:

GATCTGCAGA TAGTTCTTTT TCAAAATATT GTTTAGACAA AATAAATTC TTAAATATA 60  
ATATCTCTAC TTCAAA 76

SEQ ID NO:5233

SEQUENCE LENGTH:314

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06247

SEQUENCE DESCRIPTION:

GATCGNTCTG GTCGCAGCTT AGGAACAGCA GACGTGCACT TTGAGCGGAA GGCAGATGCC 60  
CTGAAGGCCA TGAAGCAGTA CAACGGCGTC CCTNTGGATG GCCGCCCCAT GAACATTCAG 120  
CTTGTCACGT CNNGATTGA CGCACAGCGG AGGCCTGCAC AGAGCGTAAA CAGAGGTGGC 180  
ATGACTAGAA ACCGTGGCGC TGGAGGTTTT GGTGGTGGTN NNGGCACCCG GAGAGGCACC 240  
CGCGGAGGCG CCCGTGGAAG AGGCAGAGGT GCCGGCAGGA TTTCAAAGCA GCAGCTTTCG 300  
GCAGAGGAGC TTTN 314

SEQ ID NO:5234

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06248

SEQUENCE DESCRIPTION:

GATCAATACC AAAAGACACT TGGAACTTC TTTTAGACTT CAGTACGATG ATTGCAGATG 60  
ACATGTCTAA TTATGATGAA GAAGGAGCAT GGCCTGTNCT TATTGATGAC TTTTGGGAAT 120  
TTGCACGCCC TCAAATTGCT GGGNCAAAAA GTACAACAGT GTAGCACTAA AGGNNCCTTC 180  
TAGAATGTAC ATAGTCTGTA CANTAAATAC ANCAGTAAAT TGCACAGTCA GNANNNNN 238

SEQ ID NO:5235

SEQUENCE LENGTH:83

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06249

SEQUENCE DESCRIPTION:

GATCTGCAAA CAATGAAGAA TTATGTAATA TATTGTACAA ATGTAAGCAA AGGCTCTGAA 60  
ATAAAATGCC ATAGTTTGTG AAA 83

SEQ ID NO:5236

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06250

SEQUENCE DESCRIPTION:

GATCTTAAAT ATCTTGACG CTTAAATCAC TACAAACATT TGCATTNTTA TTATGCCAGT 60  
TATTTCCAAA ANGATTGTN ATACATGTCA CTTATGTTTT TAAGCTANTA TTGACTGTAG 120  
GATAATCTCC TTGTTCCCT CAAAATAGTC ATGNAAGTGT ACATGAANNT NTTTTAN 178

SEQ ID NO:5237

SEQUENCE LENGTH:139

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06251

SEQUENCE DESCRIPTION:

GATCTGAAGA GCTTTGCAGC TCTNTTAAAT AGGTTGCTGN ACATGTTCTA AGGTTTGTGA 60  
GAACACGTGT GCCTGTTTAA GTGTATTGAT GTTAATANTA TTAAATATCC TAATGATNGA 120  
ATGCATTGTA TGGTNTCTN 139

SEQ ID NO:5238

SEQUENCE LENGTH:363

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06253

SEQUENCE DESCRIPTION:

GATCTAAGCC ACAGNGGGGA CTGGAGCCTC GTTTCCCCC TAGGCAGACC TAAATCAAGC 60  
 AGCTTACCAC AATAGTGCAT GCTGAGTAGA TTAGTTCCAA GGAAGGGAGA CTGGAATGCT 120  
 GGTGTCAAGG AAAAGCCTCC CTCATCATCT AGTCTAAGAC CATAACGGGC AGAAGCATAA 180  
 GAGGTTCCAG GGCCATAGGN GANTGAGAAG TAGGGCACAT ATAGGGAGGA AAGAAAAGTG 240  
 NAGNNGGGGG ANATCTCCGA NTTTTTTTAC TGCTTGGGAA AAGTGTACTA CATGANGGNT 300  
 GCTTNGGGCT TTGCTAACCT GCTCACCGCT AACCCTNCCA AGTNTTAACC ATCCCCAGNG 360  
 GTN 363

SEQ ID NO:5239  
 SEQUENCE LENGTH:171  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS06254

SEQUENCE DESCRIPTION:

GATCTGAGGA ACAAATGAT GTCATTTAAT CGGAATCTAA ATGTGACACA AACACGTGC 60  
 CAGCAATACC TGCTTGTAATAAATGTTCT GAGCCACAG TGTTCTGGG TATGTGAGTT 120  
 TATATCAAGT GAAAAGGCTG CTTAATTGAC ATTAAAGTTT TGAATGTAA A 171

SEQ ID NO:5240  
 SEQUENCE LENGTH:348  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS06255

SEQUENCE DESCRIPTION:

GATCATAAGT ATAAATGTCC TCGTTTAAAT TTTCCATATT GAGGACAGCC TCTGCATATA 60  
 AAAATGTTCA TTGGGAGAAA AATTATTTTT AAAACTAAAT TTTTATAGTA GTCCTCCATT 120  
 ACTGGCAATT AAGGAGCAAC CCACAAAATG TCATTATGTG GTTCTTTGAT TAGGCATAAA 180  
 ANGTATTGCA AACAGCTTTN CTATTCCTTT GGAATATGAN TCTTTTAAAT GTCTAANGTT 240  
 AACCTGCAAC ATATTCTAGT AGGACANGTC AATGTAAATN AGGTAATTNT NGCCTGTNTT 300  
 ATACCTNCTG TNGCCATTG GTNCAAATGN NAACCATTTN TNAGNCCN 348

SEQ ID NO:5241  
 SEQUENCE LENGTH:357  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS06256

SEQUENCE DESCRIPTION:

GATCAACAAG AGAAATAAAA AAGCCCAAGA GGAAGTGGTA GGGGAAGGAA TTTAAGAACA 60  
 GCAATAAGTA AAACCTTTAA GTAACCTCAA AAAGAAAATG GTACATTTTG CCAAAGACCA 120  
 CTTATACITG AGAACATGGA AGAATTTGCC TGATACTNNN NGNNGGGGAA AAGAGTCTCT 180  
 CCTCTTTTCC TCAAACCCCA GTACACTCAG CCTCTNTGCC CCACCTTCTC CTGACTTTGT 240  
 CCTCACTTGC TTCTGCAGTA CATTGGAACC TGNNTTGAAA GAAAGTCTTC CTTGANTAAT 300  
 TGGAGTTTGT CTTTGNNGNG CAAATTTAGN CCCNNGGNTC ACAAGNTTTC GGGGGTN 357

SEQ ID NO:5242

# EP 0 679 716 A1

SEQUENCE LENGTH:160  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06257  
 SEQUENCE DESCRIPTION:  
 GATCGGGGAC ATCCTTAGGC TGGTGGCCGG CCGCATCAAG AACACCTTCT GATTGAGCGG 60  
 TTGCCATGGC CGGTCTCCGT GGGGCAGGGT TGGCCCGCAT GTGGAAGGGC TCTGAGCTGT 120  
 GTCCTCCTTC ATAAAAAGTT TTTATGTCTC GTGTCAGAAA 160

SEQ ID NO:5243  
 SEQUENCE LENGTH:122  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06258  
 SEQUENCE DESCRIPTION:  
 GATCAGACTA AAAACNATAA CACCATAGGT CAAAAAAGT TGTCTGAGG TTTTTTTGAA 60  
 ACATTAAAGN TCCAAAACAT GACATTTTA AGAATAAATT TGNAATAGAG TATAATTGNN 120  
 TN 122

SEQ ID NO:5244  
 SEQUENCE LENGTH:71  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06259  
 SEQUENCE DESCRIPTION:  
 GATCTCCCCT CTCACCCCTC CCACCCATTA ATCTCCTCCC AAAAAACAAG TAAAGTTATT 60  
 CTCAATCCAA A 71

SEQ ID NO:5245  
 SEQUENCE LENGTH:114  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06260  
 SEQUENCE DESCRIPTION:  
 GATCTGTGT AATATATGGT GGATATTTTC CTTTAATTTT AACATAACC TCTGAAATNT 60  
 GTATCTNTCC TTTTNTATCT TACCATTANT TTAAATCTA GTGGATTGGT TTTN 114

SEQ ID NO:5246  
 SEQUENCE LENGTH:337  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06261  
 SEQUENCE DESCRIPTION:  
 GATCAGACCG CTCAAAGGTC CCCGTNTTCA CTGTTACCCA GAGGCTCTTG TNACTACCCA 60  
 CTTCAATCCC CACCGTGCC AGTGCCACTG CCAACCCTGT TCACAGGCGN TTCCAGCCCA 120

CTCCAGCCAG GGGAGCAGGG AAGAAGAAGG GGCTCCCTCC TCTTCACATT CCCCCCGACC 180  
 CCAAAGCCAG AGAAAGCCAG ATGGCACCAG CTGCTCCGGA TGTGCCTGCC CACATTGGGG 240  
 GACAGGGCCG GGCCTGGGCT CGGTTCCNAG GTTTGAGCTC TGCAGNCTGT GTCCTGGNGT 300  
 5 GAGGGGGCTG AAGTNAGNCC AAAGGAAGAA CTNAGTN 337

SEQ ID NO:5247  
 SEQUENCE LENGTH:168  
 SEQUENCE TYPE:nucleic acid  
 10 TOPOLOGY:linear  
 CLONE:HUMGS06262  
 SEQUENCE DESCRIPTION:  
 GATCACCTNA TTTTNAAC AAAATATTN TAACAGGAAT GGGTGGGAGT NCTGGTGAAA 60  
 15 AGAGGTGAAA TGTGGTTGTA TGAGCCAATC ATATTTGTAA TTNTTAAAA AAAGTTTAAA 120  
 AGGAAATATC TGTCTGAAA CCCCACTTAA GCATTGTINTT NNTATAAN 168

SEQ ID NO:5248  
 SEQUENCE LENGTH:378  
 SEQUENCE TYPE:nucleic acid  
 20 TOPOLOGY:linear  
 CLONE:HUMGS06264  
 SEQUENCE DESCRIPTION:  
 25 GATCAACAAA GAGGACTTTG TGGCACTGGA GAGGCTTACC CAGGGGATGG ACATTCACTG 60  
 GATGCATGTT NCTGGTCATT CGGGATTTAT AGGCAATGAA GAAGCTGACA GATTAGCCAG 120  
 AGAAGGAGCT AAACAATCGG AAGACTGAGC CATGTGACTT TAGTCCTTNG GAGAACTTNA 180  
 GCCAGCGGCT GTCTTGCTGC CTGTACTTAC TTGTGTGGA AATAGCCTGC AGGTAGGACC 240  
 ATTGCAGTGA TGGGCAGATT GGGTCTTTCA CACGGNGTCA GGCACAGTGG CCTTCTGTNG 300  
 30 NCATGGTNGT TTTATANANA AATNGGTAA GGTATATAAA TAAAGTNTGG NCCANCTTTT 360  
 GNNAAGGNAN GANATGGN 378

SEQ ID NO:5249  
 SEQUENCE LENGTH:131  
 SEQUENCE TYPE:nucleic acid  
 35 TOPOLOGY:linear  
 CLONE:HUMGS06267  
 SEQUENCE DESCRIPTION:  
 40 GATCANCTAC AGGAAAAGTA AATGTGAACG CAAGCAGAAT GAAACACAGT AAAAGCCGGT 60  
 CTAGCCTGCC TGGCCACACT CTCAGCGCCT TGTGAGGATG GNCANTANA TAAANTCATC 120  
 TTTAGTAGAA A 131

SEQ ID NO:5250  
 SEQUENCE LENGTH:322  
 SEQUENCE TYPE:nucleic acid  
 45 TOPOLOGY:linear  
 CLONE:HUMGS06268  
 SEQUENCE DESCRIPTION:  
 50

55

GATCATCACT AGCAGATGTC AGTTGCACAT TGAGTCCTTT ATGAAATTCA TAAATAAAGA 60  
 ATTGTTCTTT CTTTGTGGTT TTAATAAGAG TTCAAGAATT GTTCAGAGTC TTGTAAATGT 120  
 TATTTTAATA ATCCCTTTAA ATNTNATCTG TTGCTGTAC CTCTTGAAAT ATGATTTATT 180  
 TAGATTGCTA ATCCCACTCA TTCAGGAAAT GCCAGGNAGG TATTCCTTGG GGAAATGGTG 240  
 CCTCTTACAG TGTAAATNTT NCCTCCTGNA CCTTTGCTAA TATCATGGCA GANTTNNCCT 300  
 NATCCCTTTG TGAGGCAGTT TN 322

SEQ ID NO:5251

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06269

SEQUENCE DESCRIPTION:

GATCAAAAAT AAGATTACAG TTAATAATATT NCTATATTCA GATGGTTTAG AGACCAGGCT 60  
 GTAGAATCAG ACAGCCCTGA AATTGTATCA CACANGGCTG TGTACCCTG TACAAATAAC 120  
 TTAGCCTTAC TAAGCCTGTA TTTCTCATC TGCAAANTAG GGNTGNTAAT ATACCTGTNG 180  
 NTAANATGT TTTATTAAA AANCGTTGGC GCAAA 215

SEQ ID NO:5252

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06270

SEQUENCE DESCRIPTION:

GATCTAAAGT GCAGCAGAGT GGCTGNTGCT GCAAGTNATG TCTAAGGCTA GGAACATATCA 60  
 GGTGTCTATA ATTGTAGCAC ATGGAGAAAG CAANTGTAAA ACTGGATAAG AAAATTATTT 120  
 TGGCAGTTCA GCCCNTTCCC TTTTCCCAC TAANTTTTN CTAAATTAC CCATGTAACC 180  
 ATTTNANCTC TCCAGTGCAC TTTGCCATTA ANGTCCTGTC ACATTGAAA 229

SEQ ID NO:5253

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06271

SEQUENCE DESCRIPTION:

GATCGTGAAG GAGGCTTACC CAGACCACAC ACANGTTTGA GAAAAACAAT CCCCATTATN 60  
 ACCCATCTAG CAAAGAGGAC AACCCCTAAGT GGTCCATGNG TGGATGTACA GTTTGTNCGG 120  
 ATGATGAAGC GTTTCATTCC CCTGGCTGAG CTCAAATCCT GTCATCAAGG CNCACAANGC 180  
 TACTGNTGGC CCTNAAAAA ATATTGTTNT NTGTCATN 219

SEQ ID NO:5254

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06272

## SEQUENCE DESCRIPTION:

GATCAGCTG AAAGAATACC TTGCAGACAC TTAATCTCTG CGGCAAATGC ATGAAAGTAG 60  
 AAGGATGAAG CCAACTTTCC AAAAAGTTTT ATGAAATTAC TTCAGTGNGA AAACCTATTA 120  
 AATNAANTNC AGCCNTTCTN TAAA 144

SEQ ID NO:5255

SEQUENCE LENGTH:184

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06273

## SEQUENCE DESCRIPTION:

GATCCCGGGG ACATGATGCG GGAAATCCGC AAAGTNTTGG ACGCCAATAA CTGCGACTAT 60  
 GAGCAGAGNG AGCGCTTCTN GCTCTNCTGC GTCCACGGAG ATGGGCACGC GGAGAACCTC 120  
 GTGCAGTGGG AAATGGGAAG TNTGCAAGCT GCCAAGACTN TCTCTNNACG GGGGTCCGGG 180  
 TNTN 184

SEQ ID NO:5256

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06274

## SEQUENCE DESCRIPTION:

GATCAATGTG GGCACCTAAA AGGGTATGTT AAAATCACCA TTTCTCAGGT CAAAATACTG 60  
 TGAATAAGTC TTCAATAGAA TCACTANTGG TTNAAA 97

SEQ ID NO:5257

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06275

## SEQUENCE DESCRIPTION:

GATCATATCT ACATGTATGA ACTTAACATG GAAAATGTTA AGGAAGCAAA TGGTTGTAAC 60  
 TTTGTAAGTA CTTATAACAT GGTGTATCTN TNTNCTTATG AATATNCTGT ATTATAACCA 120  
 TTGTTTCTGT AGTTAATTA AAACATTNAC TTGGTGTTAG CTTTCTCAG AAA 173

SEQ ID NO:5258

SEQUENCE LENGTH:176

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06277

## SEQUENCE DESCRIPTION:

GATCTTTCTG GGAGCTGCGC CGGACAGAGT GGGGAGCTCC TAGTTTNTGG GGGGAAGCTT 60  
 TGATATCCAT GCCACGTCCA TCCACCCAC CCCTNTTCGT CACGAGCACA ATGGTCTTAC 120  
 ATTGATNTN TGTAATAAAA TANAATAAAA TGGAGACTTT AACTCAAGCA ANNAAN 176

SEQ ID NO:5259

SEQUENCE LENGTH:93

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06278

SEQUENCE DESCRIPTION:

GATCATTGA ACCTAGGAGT TAGAGGCTGC AGTGAGCTAG AATTGCACCA CTGNATTGCA 60  
CCTTGGACAA CAGAGTAAGA CTCGTCACC AAA 93

SEQ ID NO:5260

SEQUENCE LENGTH:296

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06279

SEQUENCE DESCRIPTION:

GATCAGGAGG CCACCCCTT CTGTGGCACT TCTGAGATGA CAACTTGTTT CACAGTTGGA 60  
TGGGGGTGGG GAAGGAAAGA GCGGCCCAT TATCCAGAA CATTITATCC ACACAGGCTC 120  
AGACACCTGT TGATGAAGAG TCCAAGAACA GCCTGAGATA AGGATGTCAT TTTTNTTCA 180  
CAGGNCCAC GATGGGTITA TTTTGGGA CCAAGACATT GGGTCCCTAC ATGTTTTCCC 240  
CTACCCTTCT NNGGGAATAA AATATCAAC ANCCNCANA GNTGTNNTAT TNNTGN 296

SEQ ID NO:5261

SEQUENCE LENGTH:61

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06280

SEQUENCE DESCRIPTION:

GATCTATTGA CTGTAGAGG TTTGGGACAA ACAGGAATAT AAAGATTATG GAATTGGGAA 60  
A 61

SEQ ID NO:5262

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06281

SEQUENCE DESCRIPTION:

GATCACTGCA AACTCAAGG AGGCCCGGGG CAGAGGAAAA AAATTACCA CCGATGATTC 60  
CATTTGTGTG CTGGGAATAA GCAAAAGAAA CGTTATTTT NAACCTGTGG CAGAGCTGAA 120  
GAAGCAAACG GATTTTAAGC ACAGGATTCC CAAAGANCAG TGGTGGCTCA AGCTACGGCC 180  
CCTCATGAAA ATCCTGGCCA AGTACAAGGC CAGCTATGAC GTGTCGGACT CAGGCCAGCT 240  
GGAANCATGT GCAGNNCTGG NGTGTCTGAC CCAGTCCCGN CTGCATGTGC CTGCAGCCAC 300  
CGTGGNCTGT CTCTTTTTTG TNACACTTAA GTTNTTTTN 339

SEQ ID NO:5263

SEQUENCE LENGTH:258



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06282

SEQUENCE DESCRIPTION:

GATCTTATCT ACTTTCTCAT CTCCATATTT TGTAAAGAT AATATTGCCA GATGTAAAGA 60  
 AAATGGTTTA TTCTACCTAA AGAGTGGATA AGGAGAGAAN ATTATGATGA AATAAAAATT 120  
 ATAAGCAAAG TTTATTTAAN CTAAATTTAA ATGTGAAACA TCACCTTTTT CCTANTCAGA 180  
 TTTGATATTG CTACGGATAT ATNTTGNTGA TATNGTCACT ATATANNCAT ANGGGGANTT 240  
 TNACTNTCTA TTACCCTN 258

SEQ ID NO:5264

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06283

SEQUENCE DESCRIPTION:

GATCTCTCTC CTCTCTGACC TGGATACGCT TTGGTTTCTC AACTTCTCTA CCCCCAAGAA 60  
 AAGATTATTC AATAAAGTTT CCTGCCTTTC TGCAAACATA AA 102

SEQ ID NO:5265

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06284

SEQUENCE DESCRIPTION:

GATCTAGATT TGAAAGTAAA TTTTATGAAG ACATTGCCCA TTTTACTTC CTCATTCATT 60  
 ATTGTACCAG CATCATAGCT TTATTACTCT AATCCCAGGT AAGTCAAGCC TACACTGCCC 120  
 TAGNGGNNGC GTAAACCCAG AANTTCATGC TGGCTTAANT AATCTATTTT TGTTCCTNAT 180  
 CNTTTGAATN TTAAAN 196

SEQ ID NO:5266

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06286

SEQUENCE DESCRIPTION:

GATCAGCCTG GGCAACATGG TGAGACCCTG TCTCTACAGA AAAGACCTGA AAATTTTAAA 60  
 AAAAAGTATA AAGCCAAGCT GTTACCCAGC CACCTTGCTC ACATATTCTC AGGACCTGCT 120  
 GAGGTGGTTT CACAGGTCAT AGTCCTCACA TTTGCTCAGA ATAAATATCT TCAAATATTT 180  
 AAANNNGGN NANAATNTNT GNN 203

SEQ ID NO:5267

SEQUENCE LENGTH:136

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06288

SEQUENCE DESCRIPTION:

5 GATCTGGACT ATCCACGTGC TTGAAACTT TTCCCCTCAC CCTCCAGCCC TGGAGGCTTT 60  
 TGCTGGGATG AATGTTTTTA TAGGGTTTTT GTTGTAAACAT AAGCTATTTT CTAATATGCT 120  
 GCCAGGTACC CTTAAA 136

SEQ ID NO:5268

10 SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06289

SEQUENCE DESCRIPTION:

15 GATCTNGGAC TACNACTGGA CTA TAGCCT CCAGAACTAT NAAATAATAC ATTTCTAATG 60  
 TCTAAGCCAA A 71

SEQ ID NO:5269

20 SEQUENCE LENGTH:345

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06290

SEQUENCE DESCRIPTION:

25 GATCGGTTTT TGTGGGGAAT CTCCCTTATA AAGTTGAAGA ATCTGCCATT GAGAAGCACT 60  
 TTCTGGACTG TGGAAGTATC ATGGCCGTGA GGATTGTNAG AGACAAAATG ACAGGCATCG 120  
 GCAAAGGGTT TGGCTATGTG CTCTTTGAGA ATACAGATTC TGTTTCATCTT GCTCTGAAAT 180  
 TAAATAATTC TGAATCATG GGGAGAAAAC TCAGAGTCAT GCGTTCTGTT AATAAAGAAA 240  
 30 AATTTAANCA ACAAATTC AATCCACGAT TGANGAATGT CAGTAAACCT AAGCAGGGAC 300  
 TTAATTTTAC TTCCAAAAC GCAGAAAGNC ATCCTAAAAG CTG 345

SEQ ID NO:5270

35 SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06291

SEQUENCE DESCRIPTION:

40 GATCTCTGCT GTGCAGGTGC TAAGATTAAA CACTAAAAAG AAAGAGAGAT ATATGTAATG 60  
 TACAACTGAC ACTGCCATTT TNCCTTTTTG GAGGAAATGG ACATAGATAA AGAAGATATT 120  
 TCTNCGGTTA AA 132

SEQ ID NO:5271

45 SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06292

SEQUENCE DESCRIPTION:

50 GATCTTCTGC CAAGTAATTT TTTTGCACAA TTTTCTGTN CCAAANTTTA CTCAGTTAAA 60

55

AGTAAANAA TNCCTTACAC GTTTTAGGTT TTAGGACATT AAAAGTATGT N 111

SEQ ID NO:5272

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06293

SEQUENCE DESCRIPTION:

GATCATCTTA CGATATCAAG CTGAAAATTT CACCACTACC TGGACAGTTN CACATGTTTT 60

ACTGGAATA TTTTTCCTTT NTTTNTGTA TGCTCTGTGC TAGTAGGNTT GATTGAN 117

SEQ ID NO:5273

SEQUENCE LENGTH:232

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06294

SEQUENCE DESCRIPTION:

GATCATATTC ATTATGAAAG GTCAAGCAAA GACAGCAGAN TACCAATCAC TTCATCATT 60

AGGAAGTATG GGAACATAAGT TANGGAAATC CAGAAAGANG CCAAGATATA TCCTTATTTT 120

CATTTCCTTCA CAACTACTAT GATAAATGTG ANGAGGATTC TTTTTNTTG TGACCTATAA 180

TANTTNTACA NGCTTTCATG CATTACTTG GTCCTAAGCA AATTANNGC AN 232

SEQ ID NO:5274

SEQUENCE LENGTH:56

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06295

SEQUENCE DESCRIPTION:

GATCAAGTAT AATGTTAGCT GCAGGTTTTT AATAAATACC TTAATTCAGT TTGAAA 56

SEQ ID NO:5275

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06296

SEQUENCE DESCRIPTION:

GATCCTGAAC ATGTGCTGAT TTNAATTGTG CTATATAGTA TATAAANTAA AATANTTTTG 60

GTATTCTGTC AACGTGACCT GATAATNAAT CTATTCATCC TGAGNAAGCT ATACTTCTGT 120

CCNTN 125

SEQ ID NO:5276

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06297

## SEQUENCE DESCRIPTION:

GATCATTGGT TCCANNCACA GGTNTAGTAA TNNTGGGTAC TTAAAGGTTT GGAGCACTTA 60  
 CAAGGCTGTG GTAGAATCAT ACCCCATGGA TACCACATAT TAAACCATGT ATATCTGTGG 120  
 AATACTCAAT GTGTACACCT TTNACTACAG CTGCAGAAAGT GTTCCGGNTA GACAAAGTTG 180  
 TGACCCGGGG NNCTCTGN 198

SEQ ID NO:5277

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06299

## SEQUENCE DESCRIPTION:

GATCTCAAGT TGTATAAAC CAATAAATTT GTGTTACTGC AGTAGTAATC TTATGCACAC 60  
 GGTGATTTC TGTATATAT GCAAAGNAGG CAACTGTTTT CTTAGTTACA GAAGTTTCAN 120  
 GCTTCACTTT TGTGCAGTAG AAACAAAAGT AGGCTACAGT CTGTGCCATG TTGATGTACA 180  
 GTTTCGTAAA TTGTTTACA AGACTTTGAT AATAAAACCC TTAANCTTAA A 231

SEQ ID NO:5278

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06300

## SEQUENCE DESCRIPTION:

GATCAAGNGC CATAGCCTTT ATTCAGGGGG CCTATAAAC CCTCCAGTTC TTGCCCCAGG 60  
 GCTGGCCTGC TAGCGCTTCA AATCCCAAGG TGTCCCTAAT TTNAGAAGTA ACCTTTTGA 120  
 ATAGCATTAG ACCCTGGCTG TCCCCTCCCC ACCAAATAAA CATGATATTT CATTCTNAAA 180

SEQ ID NO:5279

SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06301

## SEQUENCE DESCRIPTION:

GATCAAGNNT ANTGCAGCCN TTCTTTTCCT ATTTCTTTT TTNAAGGGTT AGTATTAACA 60  
 AATGGCAATA AGTAGAAAAG TTAACATGAA GATTTTAGAA GGAGAGAACT TACAGGACAC 120  
 AGATTGTNA TTCTTTGACT GTNACACTAT TGGATGTN 158

SEQ ID NO:5280

SEQUENCE LENGTH:375

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06302

## SEQUENCE DESCRIPTION:

GATCGAACAT MACGTGGTGA TGAAAGCCAN CAGCAGCCTA CCCAAGAAGC TGGCACTGCT 60  
 GAAGGCCCCA GCCAAGAAGA AAGGGGCAGC TGCCGCCACC TCCTCCAAGA CACCTTCTG 120

EP 0 679 716 A1

AGGACGCTGG CCCCAGTGCA GGCCAACATC NCACCCCTA CCTCCATATG GGACCTTGCA 180  
GGTAATCCCA CAGGCTGCAC TGTAGGGGGG GGGACCCCTGT CCCCCAGCAC TGGGCTTCAC 240  
CTAGAACTTC AGTGGGGGCC AAGGGTGCTG AGAACCCAGC AATGNCCAGG ANGATACAGT 300  
CACTAACTT CATCTGTCCC CGTGCCCTT CCCAGGTCCT GNTTCACAGG TTTAACCCAG 360  
NACANTAAAN CCTNN 375

SEQ ID NO:5281

SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06303

SEQUENCE DESCRIPTION:

GATCAGGATG AGATTAAATG CCCATATCTT ACCAGTTCAG TAATCTCCAG AGCCATTTC 60  
CCCTTTAGAG TGAGTCACAT GCAGGGAGTG TGAATGTCAG AGGTGGTTTA TTATCCAGTC 120  
TGCCTTACCC TTAATCTGTT CACAGATATT TATTACTAA TGCTTTTTT TTCTTAAGAG 180  
TTATGGGATA GGAATATGAA GTGTTTGCTC TTCATTTACT AAATGATTGT AAAGTTGAGT 240  
TTTTCATCAA AATAAAATTC CATTGTTTTA AA 272

SEQ ID NO:5282

SEQUENCE LENGTH:379

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06304

SEQUENCE DESCRIPTION:

GATCCAAGGC CACAAGTAAG GCTATGGCTC TAATTCTAGA AGACAACCTT CCAAGATGCC 60  
TGGCAAAACC ACCTCCCTGT GCCACACAGA CACTAGGC CTGTGATTT ATTCCCTT 120  
CAAAGCAGAC TGAGGAGGGA GGAGACGAGG TTCTCTGGC ATCACTTTCT CCCTGGCTGC 180  
AGAACTAGAC ACCCTTGAAG ATTTGGCCTG GGCCAGTNAG ACTGAAATCA AGAAAAACAG 240  
AAGGGATGTG CAGGGTGGGG GGGTNCCTT CCTGCTCCA TGTCACCCC CAGGGCCTCC 300  
AGCGTGCAGA CGCGTGTCT ANTTNATCTG CTCCCACGGA TGANCCTGGT CTTCAATGGG 360  
TTAGCAGNNG NGAGATNTN 379

SEQ ID NO:5283

SEQUENCE LENGTH:377

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06305

SEQUENCE DESCRIPTION:

GATCCTCTGA AAAGGCCAG AAAAAAGCT CAGTTCAAAT ACAATGTTCT AGGACAATTG 60  
GAATATAAAT ATTGTCCAAA AATATAATTA AAAGAAAAA GTTTAGCACT GTGTAAAGTA 120  
AGTGTTAACT GAGGAAGTCC CAAAAAGGTG CTGTCACTTT AAGTTCTGGA CTTGGGGTTC 180  
TTTGTATTG TAAACAGCAA NGCATTGTG TTTGTTGTC TATTGTAAA GCANCCACCT 240  
TCCTTATTGG MAGGNGANAA NNGGGGTNC ATNCATGTNA NTACTTGCTG CAGCAATTNA 300  
TATGTTTAT TTTGTGTAN GCTTTTTGTT GCATCGTGNM CACATTATT GTTACCAATG 360  
GACATGGGTT CTTGTN 377

SEQ ID NO:5284

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06306

SEQUENCE DESCRIPTION:

GATCGTAGTG TTTTAAATA AACACAGTCC AGACTCAAAC GGAGGAAGCC CACATATTCT 60  
ATTATAGATA TATAANTANT CACACACACA CTTGCTGTCA ATNTTTTGAG TCAGTGCATT 120  
TCAAGGAACA GCCACANAAT ACACACCCNN N 151

SEQ ID NO:5285

SEQUENCE LENGTH:325

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06307

SEQUENCE DESCRIPTION:

GATCAACTGA GGAAACTCCA GGCCATGGTG ATTGANATAT CAAACAAAAC CAGCAGCAGC 60  
AGCACCTGCA TCTTGGTCCT ACTAGTCTCC TTCTGCCTCC TCCTTGTTACC TGCTATGTAC 120  
TCCTCTGACA CAAGGGGGAG CCTGCCAGCT GAGCATGGNG TGTGTCCCCG CCAGCTTCGT 180  
GCCCTCCCCA GTGAGGACCC TTACCAGCTG GAGCTGCCTG CCCTGCAGTC AGAAGTGCCG 240  
AAAGACAGCA CACACCAGTG GTTGGACGGC TCAGACTGTG TACTCCAGGN CCCTGGCAAC 300  
ANTTCCTGCC TGCTGCATNA CNGAN 325

SEQ ID NO:5286

SEQUENCE LENGTH:204

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06308

SEQUENCE DESCRIPTION:

GATCTGCCTC CTGGGAAGGG AAGGGGCCAA TGTCAGCCTC CAGGTGATTT CTTAATCTG 60  
ACATTACAAA GAGACCAACA GACTGCCAAT TCTACCACAT TCCCCTGGTG GGTACTCGAC 120  
TATGTAGTTT TMTCTATGCT TCTGGTCAAC TCTGACACAT CTTGGAATTC TTGTAATAAG 180  
AAAAGAAATT TTTATACTTT TAAA 204

SEQ ID NO:5287

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06309

SEQUENCE DESCRIPTION:

GATCCTCAAA CAGTCGGACC AGATGACAGC CAAACTCTGC TAACCCGGGA CTCCTTGCCA 60  
TGGACTTTTC CTGTTGTTGT ACACACACAA CAGAACAAAA TGANGCAAAA CAAAACAAAA 120  
AAACCCACAA AANTTTGTAA AATGTAATTA ATATTCAANG AAAAGGNGGA AANTCTTCAT 180  
TTGTTGAAAA TGAAANC GTT CTAGCAACTG TAANNNANN 219

SEQ ID NO:5288

SEQUENCE LENGTH:259

SEQUENCE TYPE:nucleic acid

5 TOPOLOGY:linear

CLONE:HUMGS06310

SEQUENCE DESCRIPTION:

10 GATCTTAAAA TTCATCTAGA TTTCAAGCAT TCAGCTGACT TGCCTCATAA ATGTAGTGAC 60  
 TGCTTGATGA GGTTTGAAA TGAAAGGGAA TTAATAAGTC ACCTCCAGT CCATGAGACA 120  
 ACTNGATTAT TCTCTNTAAC TTACAGAATG TTAGTNTAAA ATAATAAATN CATCCTTNTT 180  
 TTGGAGATGA TTAATGGAT GATTGTAAAC ACAACTTATG AAATCTGCCT NTAAACAAGTA 240  
 NCTTTNTTAA ATNNTANNN 259

15 SEQ ID NO:5289

SEQUENCE LENGTH:99

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20 CLONE:HUMGS06311

SEQUENCE DESCRIPTION:

GATCTTATTG GCTGATGGTG TTGTTGAATT CTATATCCTG TTGATTTGCT GTCTAGTTGT 60  
 TCTATCAATT ATTAAAAGAG GAATGTTAAT GTTTCAAA 99

25 SEQ ID NO:5290

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS06313

SEQUENCE DESCRIPTION:

GATCAAAATAC TTAAAGGAA AAAATGTTGG ATTTATAAAT NCTATTTTTT ATTTTACTTT 60  
 TATAATAAAA GGAAAAGCAA A 81

35 SEQ ID NO:5291

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS06314

SEQUENCE DESCRIPTION:

GATCTGAAGG CCGTTCCAAG CGAGGGTGCT TCTGAGGACA CTGAGAAGAG TTTTGCCATT 60  
 CTGAAGAGGC GAGCCTGTGG AACTNTTTAA GGTCTGTTC CCAGAAGAAT AAAAGTTTCT 120  
 CATTATGGCA AA 132

45 SEQ ID NO:5292

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

50 TOPOLOGY:linear

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EP 0 679 716 A1

CLONE:HUMGS06315

SEQUENCE DESCRIPTION:

5 GATCACTCTC CCTGACATCC ACCTGTATGA CTTTGTACCC AAATGCTGTC TTCTCTTTCT 60  
CCAATCAAGA AATAATAATC CCTCGAGTTT ACAAACACA AA 102

SEQ ID NO:5293

SEQUENCE LENGTH:196

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06316

SEQUENCE DESCRIPTION:

15 GATCTCANTC TCATGCCAGG CCTTGGGTTT GACAAACATG GCAACCGACT GGGGAGGGGC 60  
AAGGNTACT ATNATGCCTA TCTGAAGCNC TGTTCGAGC ATCAGGAAGT GAAGCCCTAC 120  
ACCTGGCGT TGGCTTTCAA AGANCAGNTT TNCCTCCAGG TCCCAGTGAA TGAAAACGAC 180  
ATTGAAGNTA GATGNN 196

20 SEQ ID NO:5294

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06317

25 SEQUENCE DESCRIPTION:

30 GATCAAGAAG TTTGTGTACA CATAATCTCA TTTNAGATA TATAACTATT TTTNTCTTTC 60  
AGAAGTGAAT CAAAATATTT CAAAATGCTG TCTTATGAAA CTACAATATT CTCACAGATT 120  
AGAAAAGTTT TNCTGTAAAA GTCAGATAGT AAATATTNA GGTTTTCAG TGTCNITTGC 180  
ANCTNCTCAA CTTTCTACT GTNGCACANG NGTAGCTGTG GTACTGTGCA AATNAAN 237

SEQ ID NO:5295

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS06318

SEQUENCE DESCRIPTION:

40 GATCACTACC TTTTCTCTC TNATCTGCTG CCATNTGAGA TGTGGCTTTC ACCTTCGCC 60  
ATGATTGTAA GGCCTTCCCA GCCCCTGGN CCTGTAAGTC CANTAAACCT CTTTGTAAA 120  
TTAAA 125

SEQ ID NO:5296

SEQUENCE LENGTH:198

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06319

SEQUENCE DESCRIPTION:

50 GATCTTACAG ACTGTATCAG TCTAATTTT AAATTTAAG TTATTTTGA CAGCTTTGTA 60  
AATTCTTAAC ATTTTATAT TGCCATGTTT ATTTGTTTG GGTAATTGG TTCATTAAAGT 120

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ACATAGCTAA GGTAATGAAC ATCTTTTCA GTAATTGTAA AGTGATTAT TCAGANTAAA 180  
TTTTTGTGC TTATGAAA 198

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SEQ ID NO:5297  
SEQUENCE LENGTH:129  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06320

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SEQUENCE DESCRIPTION:  
GATCTAATTT CCTNTTCAC ACAAACTTTA CACTTTAATC TGATGATTGG ATATTTAATT 60  
NNAGTGAACA TCATCTTGTT AGCTAACITT AAAAANTGGA TGTAGAATGA TTAANGGTTG 120  
GTATGATNN 129

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SEQ ID NO:5298  
SEQUENCE LENGTH:143  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06321

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SEQUENCE DESCRIPTION:  
GATCTGTGCC ACTTGTGTCA GAGAAGAAGA AACACGTAGN GCAAGTTGTA AAATAATTGG 60  
TAITCCTAAC AATCCTGATG TATAATTNTT TGTACTTTT GNTTGAGAA CTCTACANAT 120  
AAAAGTGCTG GGAAGTAGATT AAA 143

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SEQ ID NO:5299  
SEQUENCE LENGTH:334  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06322

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SEQUENCE DESCRIPTION:  
GATCTCTTCG ACTCCTACGA CCTTGGGGAC CTGTTGATTA ATTGAGTGGC CCTGCCTGCC 60  
CCCAGCAGCC TGCCCCGAC TCTACCTCCT CACAGACAGG CTGACAGCCC CTCTGCCTGC 120  
ACAGGGACAT TGGACACTAG GTGCTGCCCT CAGGGCATGG GGTCTCCTCG CCTTTCCTGC 180  
CCCAGCCGGC AGAAGCTGTG TGGGNGNNA TGAATGGTAC GGGTGAGGAG TGGATAAGGG 240  
GTGGTCTCA CCTTNTAAT GGAAGCTGGG CCTAGGGAGG CCCATNCAGT CTTCTGACTT 300  
CTNGACCTCT NACAAGAAGG NTGCAGGTGA GGTN 334

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SEQ ID NO:5300  
SEQUENCE LENGTH:337  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06323

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SEQUENCE DESCRIPTION:  
GATCTGGAGC CAGCTGGCTT TGCTCCGTTT CCTGGCTAGT CTGTGCCTGG TCACCAGGGA 60  
GGCTGAGTGA GGGGCTGTGA ACAGTTGCCG GAAGCACCCC CTCCTCCCC GGGCCGTGCA 120  
GCAGTGTCTG AGCTGTAGTG AAAGTTTCAG GGCCTGCAAA AGAAGAGGCT TGGGCACAGG 180

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ACTGACCATN GCTCCAGGGG TTAGGACCC CCAGGNCNGT GAAGGTGGGA GCAGCTCACC 240  
 ACCTTTNACG CAGGCTTTGG TATGTTCTCT NAGGCTTAGT TGATTTTGGG CCCNAAANCA 300  
 AATNCAAAAG GTTCTGGGC CAACCTTTTG TTAANTN 337

SEQ ID NO:5301

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06324

SEQUENCE DESCRIPTION:

GATCACAGCT CCAGGACCAG TGCAGGCTGG CTGCCCTCTT TTGGCCGCGT CTGGAATAAT 60  
 GGACGCCGCT GGCAGTCCAG ACATCAATTC AAAACTGAAG CTGCAGCAAT GAAGAAGCAG 120  
 TCACATACAG AAAAAAGCTA ATCATGCTCT CTACCAACTA CCATGAGGCT AGNAAGCAAA 180  
 GTCAACAAAC CCCTATTATA CCTTCCACCA AATTCTTTAT CATTGTCTTT CTTAGGAAAC 240  
 AGNCATACCT ATTCATTGA TTTANTAAGG TTTTATTTT CCAANGTNG NTGTGGNTGN 300  
 TTNGGNNNNN TTGTGGTGGT TGNGNN 326

SEQ ID NO:5302

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06325

SEQUENCE DESCRIPTION:

GATCTTTNAT TTACCTGTAC AGGAGTGTA ACTTTTNGT GNTTTTATTT TTCAATTGTG 60  
 AGAACCACTG ATTGGTATGT TCAACAAATT TGTGTATACA AAGAAATGGA TAAATCACTG 120  
 CTATATANGG GAAACTACCT TAGGAAAGAN TGTTTACTGA ATGTTTATNN NATN 174

SEQ ID NO:5303

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06326

SEQUENCE DESCRIPTION:

GATCAGTGAT ATTTGATGTT AGTGTGTAC TATAGGGTGC CAATAACTCT GCCTATACAA 60  
 GATGGTGTAC TTAATCAATA AACGTGTATT CTGACTGCCT TAAA 104

SEQ ID NO:5304

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06327

SEQUENCE DESCRIPTION:

GATCCTTCCG TCTCAGCTCC CCAACCCAG TAGCTGGGAC TACAGTTGCA CATCATCATG 60  
 CCTGGCTAAT TTTTNNATTT TTGTAGAGGT AGGTTTCACT ATGTTGCCCT GGCTGGTCTT 120  
 GAACTCCTGG GCTCAAGTGA TTCACCTGCC TCGGNCCTC AAAGNGCTGG TGTTTACNGG 180

CATGAGCCAC TGTGTCCGAC CCANACCTAC TANTGTTAAT NGANNTTTTN TTAACNN 238

SEQ ID NO:5305

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06329

SEQUENCE DESCRIPTION:

GATCAACAGA GTGAGACCCC TGTCTATATA TTNNTTAAAT TAAAAAATA AAAGANTAAA 60  
ATTGTGTAGC TCAGTATAGT ATCAAGATTA ATCTGCCTAC TCACATTCT ACACTTTATA 120  
NNANTGTAAT AN 132

SEQ ID NO:5306

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06330

SEQUENCE DESCRIPTION:

GATCCAGCCA TNACTAACCT ATNCCNNTTT TGGGGAAATC TGAGCCTAGC TCAGAAAAAC 60  
ATAAAGCACC TTGAAAAAGA CTTGGCAGCT TCCNGATAAA GCGTGCTGTG CTGTGCAGTA 120  
GGANCAATC CTATTTATTG TGATGTTGTG GTTTTATTAT CTTAAACTCT GNTCCATACA 180  
CTTGATATAA TACATGGATA TTTTATGTA CAGAGGTATG TCTCTTAACC AGTTCACCTA 240  
TTGNCCTCG GCAATTTAAA NGANNGTCAG TAAATTNTT TNCTGTNAA AGN 293

SEQ ID NO:5307

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06331

SEQUENCE DESCRIPTION:

GATCAAAACC CAGCAGAGTG CAAGCAGCAG TGAAGCAGGA TGTATGTGGC CTTGAGGATA 60  
ACCTNCACTG TAATAGCCTA AACACANCTC TAATTTACTT ACAGCCTTAT GTTTTGTAT 120  
TGNCTTGGTA GACTAGGTAA TTTTTTTTA AAGGNCAGGN GACGGNTATT TAAAGNCCA 180  
ATTTGTTCTA CGTAGCATNT TAACTAGTTT TNNTGCCAGC NATGTTGN 228

SEQ ID NO:5308

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06332

SEQUENCE DESCRIPTION:

GATCCCTGAA GTTGCCCTGG TCTCTGCACC TTCTAAACCT AGTTCTTAAG AGCTTTCCAT 60  
TACATGAGCT GTCTCAAAGC CCTCCAATAA ATTCTCAGTG TAAGCTTCTG AAA 113

SEQ ID NO:5309

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06333

SEQUENCE DESCRIPTION:

GATCTGTCAC TGTCTCCCGT CACCCNCAGA TGGGGCTGTC TAGTTGCAGG AAAACAAGCT 60  
CAGGGGCTCCC ACTGAGTCTC TGTGATNGTG AGTTGTAGAA TTATTTAANN ATATGTTACA 120  
ATGTAATANT AGTAGAANTA AAGTGCACAN TAAN 154

SEQ ID NO:5310

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06334

SEQUENCE DESCRIPTION:

GATCTCTTTC CCTGTCTTGG AGGTGAAAAG TNATATCTAA GGNTNTGTTT GCAGTGACCC 60  
CTAGTTTGGG GTACACAGAC CAGTGTTCCT NATTGACAGT GTTCAATAAG GCCCCGTCAT 120  
TCTCGCCAGT NTNTTGTGT NCTTAATGGG CTCCTCCTTG AANTGTGTGT GTGTTTGTGT 180  
CAAGAGGAGT TNGTGTCTT GGTAATAAAA GNTN 214

SEQ ID NO:5311

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06335

SEQUENCE DESCRIPTION:

GATCTCTNCG ANTNAATTC AATCTAGGGA AAAATGGCAG AGAAGTAAAT GGATGTNCTG 60  
GTGTCAATAG ATATGAAAGT GTTGGTTGGC GACTTGCAA TCAACAAAGT TTAATAAATC 120  
GAATNNN 127

SEQ ID NO:5312

SEQUENCE LENGTH:67

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06337

SEQUENCE DESCRIPTION:

GATCGAGAAT NACNATNTTT TGTAATGGA AATACCACTA CTAAGACAG AATGCTATAA 60  
ATAGAAA 67

SEQ ID NO:5313

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06338

SEQUENCE DESCRIPTION:

GATCTTCTGT ACTTCTGTCT TCCATAGGAC AAATNATAAG TACTACATAC CTCATCTCTT 60  
GGGTTATNAT TGTAGTCTTG CATTCTGAT TATNAATTA AAAATAAATA CCAATTATGG 120  
AAATTGTAAA 130

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SEQ ID NO:5314  
SEQUENCE LENGTH:106  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS06339  
SEQUENCE DESCRIPTION:  
GATCTACATN AGGAAAAGTA TAAGCCCCCT CCCTAATGGC CGCTGGGNGG TGAGGGCGGT 60  
GTGTTGTATG TCTTTGGGTG TTTGTTNNTT NATAAAGCAT ATAATN 106

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SEQ ID NO:5315  
SEQUENCE LENGTH:195  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS06341  
SEQUENCE DESCRIPTION:  
GATCTNAAAA AGAGAGAAGA AAATAAAAAG TATTATTTAT ATGTCAGTGC CAACTTTGAA 60  
GGTAAACAG TAGTAGTAAC TTTTGGGAGA AATTCTAAAA ACTACTTTAA AAAGAAGCGT 120  
GCACATAAAA TAANTATCTT TCTATCCAAG GCTTGTCAAT TNATATGCTT TNNTTGATAA 180  
TTTAANATNN NGCTN 195

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SEQ ID NO:5316  
SEQUENCE LENGTH:136  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06343

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SEQUENCE DESCRIPTION:  
GATCTAATTA CTTATAGATT CTGTAGTCTN GNGAAGGNGT GGGTGACGTG ATGAGAGGTT 60  
TGAGAAATGG GTGAAATGAA ATGGGGGGAT ATGTAGGTCA AATCANATNA AAGATGATTT 120  
TTTTNATGTG AATAAN 136

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SEQ ID NO:5317  
SEQUENCE LENGTH:180  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06344

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SEQUENCE DESCRIPTION:  
GATCAGCTTA AGGNTTTAGC GCTGGTGGAT AGACACTCGA GACCAGAAAT CATATTTTNN 60  
CTGAAAGTAG ATGATTTACC TGAGGATAAT CAGGAACGTT TTAATAGCCT TTNCTCTCTA 120  
AGGGAGAAGT GGACAGAAGA AGATATTGCT CCATATATTC AAGATTTGTG TGGAGAGAGN 180

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SEQ ID NO:5318

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SEQUENCE LENGTH:83

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06345

SEQUENCE DESCRIPTION:

GATCGCGGTA TATAGAGATA TGCATTTTAT TTTACTTGTG TAAAAATATC GGACGACGTG 60  
GAATAAAGAG CTCCTTTCTT AAA 83

SEQ ID NO:5319

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06346

SEQUENCE DESCRIPTION:

GATCTCCTTA GGTGATGCAC AGTCCAATA CCTGCTAACC ACCGCCGAGA ACGAGCTGGG 60  
AGTGGTGGTA GCCACAGTG AGTCAGGTAT CCAGATGGTT CCCATCAGCT GGTGTGAGAT 120  
GCAGTGCCCT AAGACCCACA CTAAGAATT CCGGAAAGTA GCCCGNGTAC AACCCGAATN 180

SEQ ID NO:5320

SEQUENCE LENGTH:126

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06347

SEQUENCE DESCRIPTION:

GATCAGAGAA TCACAAGAGC AGCAATGTG GTTTCATCAA GTGGGAAGAA AGCAGCAATT 60  
TAAATANCT TTTTGGGNGA CTGANTTGAG TAATAATAAA NCTTCAGTCT TTCGCTAATN 120  
ATANTN 126

SEQ ID NO:5321

SEQUENCE LENGTH:225

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06348

SEQUENCE DESCRIPTION:

GATCTAGACG CCCCCAAATC CTTGAGATGT GGGTATAGCT CAGGGTAAGC TGCTCTGAGG 60  
TAAAGGTCCA TGAACCTGC CCCACTCCTG TCAGCCCCTC ATCAGCCTTT TCAGCAGGTT 120  
CCAGTGCCCTG ACTTGGGATA GGA CTGAGTG GTAGGAGGAG GGGGAGTGGA GGGGCATAGC 180  
CTTCCCTAA TTCTGCCTTA AATAAACTG CATTGCTGAT TCAAA 225

SEQ ID NO:5322

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06350

SEQUENCE DESCRIPTION:

5 GATCAGCAAA TTGTTATNTT AAAAAGTTTT CTTGTTTAGG CAATTTGGTA AGTGGTTTCT 60  
 AGTTATAAAC TAGCCACTGT TGATTAACCT GAGAAGGTGA AGCAGGGGAG TTCTGAAGAG 120  
 ATTACCTAGA GCTACTTAAC CCTAAGTTAA GTAAAAATTT CACTTTCATT CTTTTCATT 180  
 TCTCATAAAC TGGTTGAAAA AACACTGTAC TACCAACAAA GGTGTCAGTT GCTTGTGCTG 240  
 CCCTGTCTAT GTTATGCTCT GAATAGGTCT CGGTAAAGAT TATATGAAA TACTATAAAG 300  
 NNTACATAAG GTAAATACT AGTCAGANAG GGTTCAGTT N 341

10 SEQ ID NO:5323  
 SEQUENCE LENGTH:157  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06351  
 15 SEQUENCE DESCRIPTION:  
 GATCTGAAGT NCTTCCATTA TATCTATATC TGTATATGNA CATATATGTG GGTGTGTATA 60  
 TATATGNGTG TATGTATATA TATACAATTN CCTGAGAACT CACTNTTTTT TGTGAATTTN 120  
 CAATAGTGTT CGCCATGTTT TCCACCAGNA TGTATAN 157

20 SEQ ID NO:5324  
 SEQUENCE LENGTH:94  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06353  
 25 SEQUENCE DESCRIPTION:  
 GATCAAGTTT TGATGAAGAT GTGAAAAACN GTTGGGCAGT ACTACTCAAG CTGAACCCCA 60  
 TGCATCAGAG AAATTACACT TTTATATNTC CAAA 94

30 SEQ ID NO:5325  
 SEQUENCE LENGTH:128  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06354  
 35 SEQUENCE DESCRIPTION:  
 GATCTGCCCT NCTCAGCCTC CCAAAGTGCT GGGATTAGAG GCGTGAGCAC CATGCCTGGC 60  
 CAGGTCTTNC TAACTAAAAA ATAATAATAA TAATAATAAA AAANAAAAAGA NGATACTTGC 120  
 AAAATAAAA 128

40 SEQ ID NO:5326  
 SEQUENCE LENGTH:117  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06355  
 45 SEQUENCE DESCRIPTION:  
 GATCAAGAGT ATTTNCTNTA GCTAGCTTAA AAAGAAAAACA TATATTTAAT GTAAAAANCAC 60  
 ATACATGGCC AAATGCAATA CTGANGAGAC AATCATCCTG TATCTTTNAT GGTTTTN 117

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SEQ ID NO:5327

SEQUENCE LENGTH:334

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06356

SEQUENCE DESCRIPTION:

GATCAATGCG CTAGTGCAGG AGCTCGGCTT CTACCGCAAG GCGGCGCCCG ACGCGCAGGT 60  
 GCCCCCCGAG TACGTGTGGG CGCCCGNAAA GCCCCAGAGG AAACCTCGGA CCACGCTGAC 120  
 CTNTAGGTCC GGGGGCGCGG CGGANCTGGG ACCTACCTGC CTGAGTCCTG GAGACAGAAT 180  
 GAAGCGNTCA GCATCCCGGG AATACTTCTC TTGCTGAGAG CCGATGCCCG TCCCCGTGGC 240  
 CAGCAGGGAT GGGGTTGGGG AGGTTCTTCC AACCGACTT TTTTCCTTC CNCAAGNTCC 300  
 ACTAAAATTT CCCTTCTGCN TTAACAAAAA AANN 334

SEQ ID NO:5328

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06357

SEQUENCE DESCRIPTION:

GATCAGCCAA ATTGGGCGGC CACCCCGNC TCCACCACTT TCCACCATCA GCTGCCAAAC 60  
 TGGTCCCTCT GTCTCCCTGG GGCCTTGGGT TCTGTTTGGG GGTCATGACC TTCCTAGTTT 120  
 CCTGACGCAG GGGNATACAG GGGAGAGGGT TGTCTTCCC CCCAGCAAAT GCAATAATGC 180  
 CCTCACCCTT CCTGAGAGGA GCCCCTCCC TGTGGAGCCT GTNACCTTCG NATTTGACAC 240  
 GAGTCTGCTG TGAACNCGC ANTCTGCTC NCACCTNCNA TCTNTCTNC CAGGGCCATN 300  
 CCTGGGCCAG AGCAGGAGGG GAGGGAGGTN 330

SEQ ID NO:5329

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06358

SEQUENCE DESCRIPTION:

GATCAAAAAT NTGTGGGTTT ATTTCTGGAG TCTCTGTTCT ATTGGTCTAT ATGTCCGTCT 60  
 TCATGCTGGT ACTATGCTGT TTTATTTACT GTAGCTTTGT AATATATTN GAAATCAGAA 120  
 GGTGGGATGC CTTAGCTTT GTNCTTTTIN CTCAAAATAA AAAATNCTTT TGAAA 175

SEQ ID NO:5330

SEQUENCE LENGTH:123

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06359

SEQUENCE DESCRIPTION:

GATCAAATCA GAGTAATTTG GATATTCATC ACCTCGAATA TTTATCTTTC CTTTGTGTTG 60  
 GGAACATTAT AATTTCTCTC TGCTAGCTAT TTTAGAATAT ATAATAAATN ATNGTCCCCT 120  
 AAA 123



SEQ ID NO:5331

SEQUENCE LENGTH:161

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06360

SEQUENCE DESCRIPTION:

GATCAAAGCC AGCCACCCCC ACCCCAACAC ACTCGGTGTC CCTTTCATCC TGGGCCTNTG 60  
TGAATCCCAG CCTNGGCCAT ANCCTCAACC TCAGTGGGCT GGAAATAACA GTGGGGNCCC 120  
TGTAGCAGTG GCAGAATAAA CTTAGATGTT NTNACAGGAA A 161

SEQ ID NO:5332

SEQUENCE LENGTH:139

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06361

SEQUENCE DESCRIPTION:

GATCNTCTCA GNGANGNCGC TTNGGTCGCA GTTTTAGGGG GTTCTCGGTT TGCAGGAACC 60  
CTGGGTGCAG GTTCGCAGCC CTGTCAACCA GCTCCGAGCC GGCAGCGAAA CCTGAAGTGG 120  
ACCTGTGGA AAATNAAGN 139

SEQ ID NO:5333

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06362

SEQUENCE DESCRIPTION:

GATCTNCTCA CCCTCGGTGA NAACAGTGTC AGCCATGCAA GCAGGACAGA ATGGTGACTG 60  
GGTGGCCTTG GTGAGCTGTG TATTTCTTAG NAGGTAGAAA ACTGTGGGAA ACTGTGGCTA 120  
ATAAAAACTA AGTGTGAGCG TCAAA 145

SEQ ID NO:5334

SEQUENCE LENGTH:351

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06363

SEQUENCE DESCRIPTION:

GATCTTAAAT NACCTATTTC TAATGTGATT CATACACGTT TTTNACTTAG TGGTTTAAAA 60  
TATGAAAGTA TATAACACA TTACCAACA CTTTGGGGTA GGAGAAGTAC GCTTAGCATG 120  
TCTGTGTCAT ACCTAATTTT TTTAAAGCTA TAATGAACTG ATACACATCA ATTTANNNCG 180  
NGGTTTTATT CTTTCAATGA ACACTGTATC AAAATTTTT NATGANGTAA TGTTAGTCTT 240  
TGTGGTCAAT AGTTATTGGT AATACTACTA GTAATATGGG TNCATGGCTA TAAGATGCTT 300  
TAGCTTAGTG GTCAGTTGTT ATNCTAAGGG GTTTNAATCN AATTNGGTNG N 351

SEQ ID NO:5335

SEQUENCE LENGTH:348

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06364

SEQUENCE DESCRIPTION:

GATCACAAGT AGAGAACTTG TTTCTTTTCA CCCCTCTTGC TCCTCCCCGG AGTTATGAAA 60  
 AATTTCAAAC CTGCCAAAAG TTTGAAGTTT ACAACAAATA CCTCCAACG TTTGGNTTGC 120  
 CTCCCTCCCC CTCTCTCCCC TTNCTCCCTC TGATTTCTTA CAGAACCACG CTTTCATGAC 180  
 CATGCCCGGG AACTTCACGC TGGCGCGGTG AGGTCCTGCG CCTCCGNTN CNGCACACAC 240  
 GTGCTTCTNA ATAGCTGCAG GCTATTTTCA GAGAGGAATT TGCTCACGTT AACATNGCTG 300  
 TTCCCAAATG CCAGGCTGNT TTTAAGTGGT TTCCTAATTT ATAAAGGN 348

SEQ ID NO:5336

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06365

SEQUENCE DESCRIPTION:

GATCTCAATA GTCAGTTACT GATGCTCCTG AACCTATGT GTCCATTNT GCACACACGT 60  
 ATACCTCGGC ATGGCCGCGT CACTGCTCTG ATTATGTGCC CTGGCCAGGG ACCAGCGCCC 120  
 TTGCACANGG GCATGGTTGA NTCTGAAACC CTCCTTCTGT GGCAACTNGT ACTGAAAATC 180  
 TGGTGCTCAN TAAAGANGCC CATGGCTGGT GGCATGCAAA 220

SEQ ID NO:5337

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06366

SEQUENCE DESCRIPTION:

GATCCAGCC ATAAAGTACC TGGGATGAAA GAAGTTTTT CCAGTTTGT AGTGTCTGTN 60  
 AGAATTACTT ATTTCTTNC TATATTCTCA TAGCACGTGT NTGATTGGT CATGCATGTA 120  
 GGTCTCTTAA CAATGATGGT GGGCCTCTGG AGTCCAGGGG CTGGCCGHTT GTTCTATGCA 180  
 GAGAAAGCAG TCAATAAATN TTTGCCAGAC TGGGTGCAGA ATTTAAA 227

SEQ ID NO:5338

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06367

SEQUENCE DESCRIPTION:

GATCTTNACT CTTGTTTCCT TTGTCCTTTT NTTCAGACAG AGTTGTACCT GCAGCAGACA 60  
 ACTCTGAATT AAAGCATGAA AACACAGCAA A 91

SEQ ID NO:5339

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06369

SEQUENCE DESCRIPTION:

GATCTCTCCC CACACAGAGG CCAGCAGACC TCTTCCTGAG GACTTCTGTT TAAAGGAGGA 60  
 CGAGGAGGAG GTTGGTGACA GTCAGGCCTG GGAGGAGCCC ACAAAGTGA GCACAGAGAC 120  
 ATGGAACCTA GCTACTTCCT GGNAGGTGGG GCGGGNACTA CGGAGAAGGT GCAGCCAGGC 180  
 TGTGGCAAAG GGCCCCANTC ACAGCCTTGG CTGGGAAGGN GGGNNGCACA GCTGANGGTC 240  
 GACTAAACA AAGTCTGTTT TCATGNAAA 269

SEQ ID NO:5340

SEQUENCE LENGTH:67

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06370

SEQUENCE DESCRIPTION:

GATCTCTTGT NATGGGGCCA ATAAGTCAAT TGAATTCATG GGCCAAACAG TTCCATTCT 60  
 CTTCAA 67

SEQ ID NO:5341

SEQUENCE LENGTH:313

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06371

SEQUENCE DESCRIPTION:

GATCCTNATN ACGNAGCTGA TGCCTGCCTT GGTNCCTACC ACTCTGGTGT AGACAGAGGA 60  
 CTTTNTCCAA GTGTCACT AAACATGCCC GGGCTTCGAT GTGCCTGGAG GATTTCCTCA 120  
 CAGGGACCCA CGCAGCTCCC TGTATCTGCG CAGTTGCTCG TGTGGCTGGA AGCGCTGTCG 180  
 ATAAGCTTCN NGGCGCTGGN TTGCCAGTTC TTCAGCTCTA GGACTTGTA CTTTAAGCAA 240  
 ACGGTGTGGC ATGGGNTTGA NGTNTGGCCA CCTGGCAGNG NTGTGCAGGG TCTTGCCTTA 300  
 NNAAGCTGG CTN 313

SEQ ID NO:5342

SEQUENCE LENGTH:87

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06372

SEQUENCE DESCRIPTION:

GATCAAAAAA TATATGAAAG TTCCTTGTAG ATACATATCT ATAGATATAT ATGTNTATGT 60  
 ATATAAGAT AGATATATAC ATTGAAA 87

SEQ ID NO:5343

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06373

SEQUENCE DESCRIPTION:

5 GATCTTTTTA TATTCTTCTA CCACACCTGG AACAGACCA ATAGACATNT TGGGGTTTTG 60  
 TAATGGGAAT NTNTATAAAG CATTACTCTT TTTNAATAAA TTGTTTTTNA ATTTAAAAAA 120  
 AGAAA 125

SEQ ID NO:5344

10 SEQUENCE LENGTH:51

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06374

SEQUENCE DESCRIPTION:

15 GATCAGGTGG AAATGTTTAA GCTAAATAAA TCTAGGGGTT NTTNAACAA A 51

SEQ ID NO:5345

SEQUENCE LENGTH:273

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06376

SEQUENCE DESCRIPTION:

25 GATCTGAAGA AACAACGCAG TGTNCACGCA AGCCACTCAG ACAAGCCCAG GGGTTCCTTG 60  
 GCCTTCTCAG TCAGCTAACT TTCCTGAGTT CTCCTTTGAC TTCCTAGGG AACAGTTGAA 120  
 CAAGAGATTT TTCAATCAAG NCTTTGGAAC TACGAAGATG GAAGAGATTT GAAGAGGGAT 180  
 ATNGAATGAG TAAATTAAGC AACTTTTTAN TATCCTATTT CTNTAAATNT CCAGATTTTA 240  
 AAACATTCCT GTATTATANT ATCTAAAAAC AAA 273

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SEQ ID NO:5346

SEQUENCE LENGTH:76

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS06377

SEQUENCE DESCRIPTION:

GATCTAGATA TTTTCTCTT TTTCTGAAGN TACTTTCTTA AAAAATAAAT AAAATGTTTA 80  
 TAGCATTCTT NGTAAA 76

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SEQ ID NO:5347

SEQUENCE LENGTH:295

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS06378

SEQUENCE DESCRIPTION:

50 GATCAATTCT CCTTTGCGAG GNGACCACCA ANGGACTGCA GAGCTGNCCG GGCATTCTGT 60  
 CGTGTTTCATG ACCGAGAACT TTNCACACAG AGAGGACTTC TGTCTGACG AAGGAGCGCA 120  
 GAGCTGGCCG NGCATTCTGT CGTGTTTCATG ACCGNGAACT TTTCACAGCT AGGACTNCTG 180  
 TCCTGACGTC TTTATNGGTA TAATAGTTGC GTTTAAGNCT GCAGACTTCA AGTTTATATT 240

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TCTCTTTATT GTAACACTCT GTGCANNNTT TGATTNCTAG TTTATTNCA TTGTN 295

SEQ ID NO:5348

SEQUENCE LENGTH:416

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06379

SEQUENCE DESCRIPTION:

GATCGACCTG AGCACAGTGG ACCTGAAGAA GCTCCGAGTT AAAGAGCTGA AGAAGATTCT 60  
 GGATGACTNN NNGGAGACAT GCAAAGGCTG TGCAGAAAAG TCTGACTACA TCCGGAAGAT 120  
 AAATNAACTG ATNCCTAAAT ATGNCCCCAA GGCAGCCAGT GCACGGACCG ATTTGTAGTC 180  
 TGCTCAATCT CTGTTGCACC TGAGGGGGTA AAAACAGTTC AACTGCTTAC TCCCAAANCA 240  
 GCCTNTTGT AATTTATTTT TTAAGNGGGC TCCTGACAAT ACTGTATCAG ATGTGAAGCC 300  
 TGGAGCTTTC CTGGATGATG CTGNCCTGC AGTACCCCA TGAGGGGATT NCCNTTCCTT 360  
 CTGTTTGCTG GTGTACTNCT GGGGGNGA AGTGTGTCTG GGGNNTTTT TNNTGN 416

SEQ ID NO:5349

SEQUENCE LENGTH:88

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06380

SEQUENCE DESCRIPTION:

GATCTGAAGA AGTGGTTAAG ACCAAGAGTT TATGTACCTT TTTAAACAAA GATTAATAAA 60  
 TTTTGAAGA AGTGATGAGA CAAAGAAA 88

SEQ ID NO:5350

SEQUENCE LENGTH:259

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06381

SEQUENCE DESCRIPTION:

GATCAGAACA TGAACTTTT TTTTAAAAGA AGATTGAGC ATTTTCCTGT AATCACATCA 60  
 AAATNATGTT TTCTGTGTA AGCGAGATAC ATATTNCTNA TAATGCAGCA TTGTGAGAAG 120  
 TCAGTTCGGC CCACTGCACC ANCACTGTCG TATCCTTGT AAAATGGTGT GTACCTTACA 180  
 ANTTATAATT TATGTGCCAG GTTCGTTTTG TNCCTAATT GCTATTATTG TGCTGTGINT 240  
 ANCCCTGTN NNCTNGGTN 259

SEQ ID NO:5351

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06382

SEQUENCE DESCRIPTION:

GATCTTATAA AGTACTTGTG TGGAGCTTTG ATTCCACAGA ATAAAAGATA TTTTGTGTGT 60  
 AGAAA 65

SEQ ID NO:5352

SEQUENCE LENGTH:226

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06383

SEQUENCE DESCRIPTION:

GATCTCAGCC CAGGACAAGG TGGGAATNAG TCAAGCCTGG ACTCTGGCCC CCCTGCCTGG 60  
 CCAGTAAGAA GGGCAAAGTC CAAGGGGAGG GATGAGGNAG GGGCCAGATG GGGTCCTGGA 120  
 GGAAGAATTN CCTGGCAAAA GCCATTGGAG CITGTNTGTG TGTCTTTGGT GATGACATNT 180  
 GTTGTGAGGG TAGATGGGAA CCATNTTAAA AGGATGAAAT GTGAAA 226

SEQ ID NO:5353

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06384

SEQUENCE DESCRIPTION:

GATCCTTTTG TAAGGCCTT CCTGAAGAAG AAAGGTGGCA AATACAGTNT TCAGTTCAAG 60  
 TTGCCCAGAC TGTATGGTGT ATTCCAGTTT AAAGTGGATT ACAACCGGCT AGGCTACACA 120  
 CACCTGTACT CTCCACTCA GGTATCCGTG CGGCCACTCC AGCACACGCA GTATGAGCGC 180  
 TTCATCCCCT CGGNCCTACC CTACTACGGC AGCGGCTTTC TNCATGATGC TGGGGGCTCT 240  
 TTCATCTNTC AGCATCGGGC NGGCTTTGCA CATGNAGGGN GAATGNTGGA NGTCCGANTT 300  
 TTNGN 305

SEQ ID NO:5354

SEQUENCE LENGTH:356

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06385

SEQUENCE DESCRIPTION:

GATCTACATT CITCAAAAAA AAAAAATTGGC TTAAGTGTTC CATCTTNAAG TAGCATTTTG 60  
 CTGCCATTTG TATTGGGCTG AAGAANTCAC TATTGTGTAT ATACTCAAGT CTTTNNATTT 120  
 TCCCNCTTTT CATAAATNCT CTTGGNCATN ATTGGGCTTG CAGAGTTCCC TTATNCTGGG 180  
 GATTACAATG CTTTATCGT TTCAGGCTTC ATTTNNGCTT CAAANCAAGC TGGGCACACT 240  
 GTTAAANCAAT GATTTTGCAG ANCCTTTGGT TTTGGACAGT TTCATTTTTT NGGATTGGG 300  
 ATAGATTNCA TAGGAGTATG GAGTATGCTG TAAATAAAAA TNCANGCTAG TGCTTN 356

SEQ ID NO:5355

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06386

SEQUENCE DESCRIPTION:

GATCTTTAAC AGTCCTTTA CTTGCNCTTT GTAAAAAATA ATAAATTAG NTTGAATTAT 60

TCTACCTTTG TAAA

74

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SEQ ID NO:5356

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06387

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SEQUENCE DESCRIPTION:

GATCCTGCTG GCCGAGCTCG AGCAGCTCAA GGGCCAAGGC AAGTCGCGCC TGGAGCAGCA 60

GAATAAGNTC CTTAACTTAA AATAAATTAA TTTTTCAAA AAACATAAAT CTGGAAGTGT 120

TGTTTCTATA TTTNATAACA AATACAGTAT ATNTNATNTA TAAGCCATGG TCTACTGATA 180

CTGTATGAGG ACTTNCCTGA N 201

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SEQ ID NO:5357

SEQUENCE LENGTH:409

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06388

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SEQUENCE DESCRIPTION:

GATCAGAAGC TTAACATATG AACCTGCAGA AATCTGGTAA GACTTAAATT CAGTGTGAGG 60

AATAACTCTA GTTCTCTCCT ATGAGCATTT CCTAAAAGCC ATCTGATTG GCATTCTTAC 120

TGGAGCTGCA GACAGAAATC TACAAAAGNCN NAAGTAAACA AAATTAAGTT ATTATTCCAC 180

TGTTAGGAAT GGAAATAAAC TTGTGAAGTC TGTTTATTTT GAAGTATTGG TGAAGTAGGC 240

TTGCTAATNG GGAGCTGCAG CAGTTTGTGT TTAATCCAGT TCATCAGCTT AGGTCATTG 300

AAAGNTATAA GAGCTTAAGG CAAGAAAGGA ATACCATGGG ATTCTATTN AGGGCCACCA 360

GNCCATTCTT GGNAAGCAGC TCCNGTTTGG TTTTCCAGCT GTCAAACTN 409

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SEQ ID NO:5358

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06389

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SEQUENCE DESCRIPTION:

GATCTGCCCC TNCGGCCTC CCAAAGTGCT GGGATTACCG GCATGAGTCA CTGCGCCTGG 60

CCGACAAAGG CTTTGATATC AGAATGAAC GTCAAGGGAG GTGCTGGAGA GGGATTAAAC 120

TGTGCAGAGN CCAANNGGTA TCGAANNAAA ANTGGGATTG GGACTAGGTG NTCTN 175

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SEQ ID NO:5359

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06390

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SEQUENCE DESCRIPTION:

GATCAGGCTC AGGCGGCCCC ACTCACCCAC AGCATCCGCC GCCACCCCTT CGGGTGTGAG 60

CGCTCAATAA AAACAACACA CTATAAAGTG TTTTAAATC CAAA 104

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EP 0 679 716 A1

SEQ ID NO:5360

SEQUENCE LENGTH:106

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06392

SEQUENCE DESCRIPTION:

GATCTTTCCC AAGAGAAGGG GAAGCACTCG TGTGCAACAG ACAAGTGACT GTATCTGTGT 60  
AGACTATTTG CTTATTAAAT AAAGACGATT TGTCAGTTAT TTAAAA 106

SEQ ID NO:5361

SEQUENCE LENGTH:382

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06393

SEQUENCE DESCRIPTION:

GATCTACGCT GCCTTCAAGG AAGTGCTGGG TTCGGGCATG CACCACCACC TCCAGAACAA 60  
TGAGCTACTC CGTGACATCT TTGGCCTGGG CCCTGTGCTG TTGCTGGATG CCACTGCCCT 120  
GAAGGCTGCG AAGGTTCCAC GCTTTGAGAA GCACCTGTAC AATGCTGCTG CCTTCAAAGC 180  
CCGGACCAAG GCTCGAAGCC GTGTGCGGGA CAAGCGGGCA GACATCCTGT GAAGCAGGAC 240  
CTGCTGAAGA GGAGACTTTC TATGCCCTTG GTCCGTATTT TTAACAGAAG ACAGTGCAAC 300  
AACTGGTCTT CACCAGTATT TGTCACTTTA TTTTITTTAA TGTCAAAACC AAAACAGAC 360  
ATGGGGTTGG GTAGCTGGGG GN 382

SEQ ID NO:5362

SEQUENCE LENGTH:354

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06394

SEQUENCE DESCRIPTION:

GATCCNATCA TTCCTTAAAC ATANTACCCT TNGTCTTGA GTAGAATACT AAGTTAGAGT 60  
TAGTGGATTT CTAGTTTAGG AGAGGAGCTC AAAACTATAA TCTNTAACAA ATTGAAAAAT 120  
GAAATAGGGT GTTTTCCCTT TTTGTGCACA CCTACATNAC CTTAAGAAAT NNCCTTCCAT 180  
AGACAGCTGC CTCAAAGGGA AATCCTCTTT AAACCGTAGT TGGCGCAGAG GTCAGTCCTA 240  
GTCGGAGCTT AGGAGGTGCG GNGACGCTCA CATCGTCTGG ACTTGAGTCG NCACTGGATT 300  
GTGGCANCAN NTTTNGCTCA TNGTCAAAA ATTTNGGCAA TTTCTTTTGG ATTN 354

SEQ ID NO:5363

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06395

SEQUENCE DESCRIPTION:

GATCCAGGGC CTCGCCGCCT TCCTTCTTCC TTTTATATA CAATTGTGTA TTGTCAAATA 60  
AAAGTAGGAA ATATTCAA 79



SEQ ID NO:5364

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

5 TOPOLOGY:linear

CLONE:HUMGS06396

SEQUENCE DESCRIPTION:

10 GATCTTTGTG GCCAAGGAGC TGCTATAGCC TGGGGTGGGG TCATGCCCTC CTCTCCCATT 60  
GTCCCTCTNC CCCATCCTCC AGCAGGGAAA ATGCAGCAGG GATGCCCTGG AGGTGGCTGA 120  
GCCCCTGTCT AGAGAGGGAG GCAAGCCCTG TTGACACAGG TCTTTCCTAA GGCTGCAAGG 180  
TTTAGGCTGG TGGCCAGGA CCATCATCCT ACTGTAATAA AGATGATTGT NAAATAAA 238

SEQ ID NO:5365

15 SEQUENCE LENGTH:321

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06397

SEQUENCE DESCRIPTION:

20 GATCCTTGTC CGTGGCAACC TTAAACGTGT GCTGCAGTGC TGATGTATTT ATAGGCTTAG 60  
CATGTCTGCT TTATTAGTTA TCCTGGAAAG AATGCTATTC AGTTTTTTTT TTAATGTCTA 120  
CATCANGGAA TGAATGCTAA ATNAGCCCAT TTAGCAGCCT GAAATCAAAT NCTGCATTIN 180  
TTTTTTNAAA CTCTGGTAG CAAAAGAAAA AGCTGATTAA ANTATGATTG TGTACAATG 240  
25 ACTAAAGGGT TANCTNCTCA TTAATTCTAA ATNCTTCAAA ATGNACAAGC ATCATAATAA 300  
AGGCTTTTGA TGNGAANTAA A 321

SEQ ID NO:5366

30 SEQUENCE LENGTH:409

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06398

SEQUENCE DESCRIPTION:

35 GATCTACAAG TCAGTGCCTT GTATGCTCTC CAGGTGCACT GCTATAACAG CAACTTCCCA 60  
AAAGGCATGT TACTTCGCTT TTTTGTGCAC TTCTATGACA TGGAAATTAT TGAAGAAGAA 120  
GCTTCTTGG CTTGGAAAGA AGATATAACC CAAGAGTTTC CGGGAAGG CAAGGCTTTG 180  
TTCCAGGTGA ATCAGTGGGC TAACCTNGTT AGAACTGCN GAAGAAGAAG AATCAGAGGA 240  
NGAAGCTGAC TAAAGAACCA GCCAAAGCCT TAAATTGTGC AAAACATACT GTTTGCTATG 300  
40 ATGTAAGTGC ATTTGACCTA ACCACTNGCG NAAANTNATT CCGNTGTAAT GTNTTCACAA 360  
TATTTNAAAG CAGANGCACG TCAGTTTNGG NTTTCTTCT GCANAAAGN 409

SEQ ID NO:5367

45 SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06399

SEQUENCE DESCRIPTION:

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GATCCTCAGT ATAGCCGGTG AACCCTGATA CCAGGAGCCT GGGCCTCCCT GAACCCCTGG 60  
 CTTCCAGCCA TCTNATCGCC AGCNTCCTCC TGGACCTNTT GGCCCCCAGC CCCTTCCNA 120  
 CACAGCCCN AAGNGTCCC AGAGCTGACC NCACTCCAGG ACCTAGGNCC AAGCCTTN 178

5

SEQ ID NO:5368  
 SEQUENCE LENGTH:75  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

10

CLONE:HUMGS06400  
 SEQUENCE DESCRIPTION:  
 GATCATTGTA ATATATTAN TTGTATATNA AGCATGACTA CTTTAAGTNT TAAATAAACT 60  
 GCAATAATCC TAAA 75

15

SEQ ID NO:5369  
 SEQUENCE LENGTH:354  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

20

CLONE:HUMGS06401  
 SEQUENCE DESCRIPTION:  
 GATCAGTGNC TGGCACCAGA CACTTCTGGG GATGGTACAG GGTGTGACAA CATGACCTGC 60  
 ATCATCATTT GCTTCAAGCC CCGAAACACA GCAGAGCTCC AGCCAGAGAG TGGCAAGCGA 120  
 AAAGTAGAGG AGGTGCTCTC TACTGAGGGG GCTGAAGAAA ATGGCAACAG CGACAAGAAG 180  
 AAGAAGGCCA AGCGAGACTA GCAGTCATCC AGACCCCTGC CCACCTAGAC TGTTTTCTGA 240  
 GCCCTCCGGA CCGTGAAGTG AGTTTTGGTC TTTTTCCTTT AGCCTTAGCA GTGGGTATGA 300  
 GGTGTGCAGG GGGAGCTGGG TGGCTTCACT CCGGCCATTC CAAAGAGGGG TCTN 354

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SEQ ID NO:5370  
 SEQUENCE LENGTH:93  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06402

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SEQUENCE DESCRIPTION:  
 GATCACTGGA ATGTGGGGAT TCTGAAACAG AAATGAACT GTCCTTTGA CAACTCTCTT 60  
 ATATAATAAA GTATACCGG CTTGTGTATG AAA 93

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SEQ ID NO:5371  
 SEQUENCE LENGTH:80  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06403

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SEQUENCE DESCRIPTION:  
 GATCATGCAT TATCTTTATA ATTCAAAAGA ATTTATATAT ATGTAAAGGA GGAGAAAATA 60  
 AAAAAAATA TAATCTTAAA 80

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SEQ ID NO:5372

55

SEQUENCE LENGTH:292

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06404

SEQUENCE DESCRIPTION:

GATCATNTTG ATAATGCTCG GAATATTTTN AAATGTCCAT TCCGCTGTGT TGATTGAGGA 60  
 CGTTCCTTC ACGGAGAAAAG ATTTAAGAA TGGCCCCCAG AACATATACA ACCTTTACGA 120  
 GCAAGTCAGC TACAACGTGT TCATCGCTGC AGGCCTTTAC CTCCTCCTCG GAGGCTTCTN 180  
 TTTCTGNCAA GTTCGGCTCA NTAAGNGCAA GGANTACATG GTGCGCTAGG GCCCCGGNGN 240  
 GTTTCCTCCG TCCAGCCNCT TCTCTATTTA ANGACTGCNN GCACCGTGTC AN 292

SEQ ID NO:5373

SEQUENCE LENGTH:194

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06405

SEQUENCE DESCRIPTION:

GATCCTNCTG GCCGAGCTCG AGCAGCTCAA GGGCCAAGGC AAGTCGNGCC TGGGGGACCT 60  
 CTACGAGGAG NAGATGCCGG ACTGCGCCGG NAGGTGGACC AGCTAACCAA CGACAAAGCC 120  
 CGCNTCGAGG TGGAGCGCGA CAACCTGGCC GAGGACATCA TCGCNCCTCG GGAGAAATTN 180  
 CAGGNNGGAG ATTN 194

SEQ ID NO:5374

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06407

SEQUENCE DESCRIPTION:

GATCCTGGAT TCACTCACTC ACTCATTCTT TCACTCATCC AGCCACCTAA AAACATTTC 60  
 TGACCATGTA AA 72

SEQ ID NO:5375

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06408

SEQUENCE DESCRIPTION:

GATCAGGCAC GAAGGTACG AACTGACCCA GATTATCGCC GACGTGTCCC AGGACCCAC 60  
 GTTGCCGCGG ACCGAGGACC ACCCGTGCCA AAAGTGCAGC CACAAGGAGG CTGTGTTCTT 120  
 CCAGTNACAC AGTGCAGCGG NCGANGACGN CATGCGCCTT TACTACGTGT GNACAGCCCC 180  
 ACANTGNGGC CACCGCTGGA CCGAGTGNC TNCNTGTN 219

SEQ ID NO:5376

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06409

SEQUENCE DESCRIPTION:

5 GATCCAACAA GAACATTTC AAAAGTATCT AGGTGTTCTC AAATAAAAAG CTTTCTTTGC 60  
ACAAA 65

SEQ ID NO:5377

SEQUENCE LENGTH:97

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06410

SEQUENCE DESCRIPTION:

15 GATCTGCTAA TGCTTTTATG GAGTCTGCCT GGAAACTTTG ACATGGTTCTN TGTITTTTACT 60  
CAAAATCCAA TAAACAAGG TAGTTTGGCT GTGCAAA 97

SEQ ID NO:5378

SEQUENCE LENGTH:206

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06411

SEQUENCE DESCRIPTION:

25 GATCCCAGAG AGCANCTTCA GTGACAAACA TATCCTTTCA AGACAGAAAG AGACAGGAGA 60  
CATGAGTCTT TGCCGGAGGA AAAGCAGCTC AAGAACACAT GTGCANTCAC TGGTGTCCACC 120  
CTGGAATAGG CAAGGNATAA CTCTTCTAAC ACAAATAAG TGTITTTATGT TTGGAATAAA 180  
GTCANCCCTG TTTCTACTGT TTAAAA 206

30 SEQ ID NO:5379

SEQUENCE LENGTH:84

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06412

35 SEQUENCE DESCRIPTION:

GATCACTTAA ATGATTTTNT GGTGATTCGT GCCATTGCTT TTTTATTTAA AAGAAAATTT 60  
TGTAATTTAA TGCCTTTTTC TAAA 84

40 SEQ ID NO:5380

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06413

45 SEQUENCE DESCRIPTION:

GATCACACCA GAGTACATGT CTCTGCCTCT NTTTTAGTG TGGCTTTGGA CAGGAATATA 60  
TGAATAANTC ACTGCCATAC AGGTTTTCCA ATACACAAGT GCTAGAAAAT ACACACAATT 120  
CCCCAAA 127

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SEQ ID NO:5381

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06414

SEQUENCE DESCRIPTION:

GATCAAAAAT GCAACTGAGA AAATNATGGC TCTTGTGCT GAGCTGTCCA TGAACAAGC 60  
 CCTAACCATT GAACTCCAAA AGGAAGTCAG GGAGAAAGAA GACTTCATCT TCACITGCAA 120  
 TTCCAGGATA GAAAAAGGTC TGCCACTCAA TAAGGAAATT GAGAAAGANT GGTGAAAAGT 180  
 CCTTCGAGAT GAAGAAATGC ACGCCTTGGC CATCGCTGAA AAGTCTCAN 229

SEQ ID NO:5382

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06415

SEQUENCE DESCRIPTION:

GATCCCTAAC TGTTCCTTA TCTGTTTTCT ACCTCCTCCT TTGTTAATA AAGGCTGAAG 60  
 CTTTTGTAA A 71

SEQ ID NO:5383

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06416

SEQUENCE DESCRIPTION:

GATCACTTAC AAATTTTTTG AATAACACAA AATCTCATT CACCTGCAGT TTAATTGGAA 60  
 AGATGTGTGT GTGAGAGTAT GTATGTGTGT GTGTGTGTGT GCGTGCACGC 120  
 ACGTCTTGAG CAGTCAGCAT TGCACCTNCT NTGGAGAAGG GTATTCCTTT ATNAAAAATCT 180  
 TCCTCATNNN NGNTTTGCTT TCAGTTGGTT TTCAATTNC TCACTGGCCA GAGAN 235

SEQ ID NO:5384

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06417

SEQUENCE DESCRIPTION:

GATCTTCCCT CTTCTGAACA GCAACTCCCC CCAACTCATA CACTGCCGTT TTCAGGGTAA 60  
 GCGGCCCTTCA CCCCTAAGTG AAAATGTTAG TGAATAAAG GAAGGAGCCA TTCTTGGAAC 120  
 TGGACGACTT CTGAAAAGTG GAGGACGAGC ATGGGAGCAA GGCCAGGACC ATGACAAGGA 180  
 AAATCAGCAC TTTCCCTTGG TGGAGAGCTA GGCCCTGCAT GGCCCCAGCA ATGCAN 236

SEQ ID NO:5385

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06418

SEQUENCE DESCRIPTION:

5 GATCCAGTAC TTGGCAGCCA TAGTTTAGAC AATATTGTTT AGTGCTGTGT TGCTNNCATG 60  
TTAACAACAA AACCTTTTAG AGGNCCCACA AATCATNGGT ATNGGACACA GGTCCGAGGN 120  
ATTCCAGAGC ATCAN 135

10 SEQ ID NO:5386

SEQUENCE LENGTH:261

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06419

15 SEQUENCE DESCRIPTION:

GATCAGCTCG CACAGAGGTT GTCTGCAAGC AGTGTGAAGC TCATCTAGGT CACGTGTTTC 60  
CTGATGGACC TGGGCCCAAT GGTGAGAGGT TTTGCATGAA CAGTGTGGCT TTGAAGTTCA 120  
ANTCAAGGGA ACACAGACCA TCTTCAAGAG TCCCGTTCCC TTGCCACCCC TTCACGTGCA 180  
20 CCTCAATTT CCACAATTCA CTTGAATGAC TTGTNTTATT NGCAATAAAA CTGGGCTGAA 240  
TTTGCTGCTG TCTCCAAANA N 261

SEQ ID NO:5387

SEQUENCE LENGTH:300

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06420

SEQUENCE DESCRIPTION:

30 GATCATAGAC ATGATTATAT GTGAGTATCA TTAATCATTG GTTTATAGCA NTTNCTCTTT 60  
ATTCCAATAT TATAATAATC CNCACCTCTAC AATCATAACC TAGGAAAAAC CAGGCCATAC 120  
AGAGATAGGA GCCGAGGGGN CATAGTGCGA AGTGGCCAGA AGACAAGAGT GTGAGCCTTC 180  
TCTTATGCCT GGACAGGGGC ACCAGAGGGC TTGGTCTAGC AGTAACACCA GTGTCTGGGA 240  
AGATGCCTGT TGCAAAGTGG ACCATGGTCT AGCGGGGGGC ATCAGTGTCG NGGTANNGAN 300

35 SEQ ID NO:5388

SEQUENCE LENGTH:299

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS06421

SEQUENCE DESCRIPTION:

GATCAACAGT GGCAATGGAG CTGTGGAGGA CAGAAAGCCA AGTGGACTCA ACGGAGAGGC 60  
CAGCAAGTCT CAGGAAATGG TGCATTGGT GAACAAGGAG TCGTCAGAAA CTCCAGACCA 120  
45 GTTTATGNCA GCTGATGAGA CAAGGAACCT GCAGAAATGTG GACATGAAGA TTGGGGTGTA 180  
ACACCTACAC CATTATCTTG GAAAGAAACA ACCGTTGGAA ACATAACCAT TACAGGGAGC 240  
TGGGACACTT AACAGATGCA ATGTGCTACT GATTGTTTCA TTGCGGAATC TTTTTTGAN 299

50 SEQ ID NO:5389

SEQUENCE LENGTH:134

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06422

SEQUENCE DESCRIPTION:

GATCCACCTG CCTCGGCCTC CCAAGGTGCT GGGATTGCAG GTGTGAGCCA CTGTGCTCGG 60  
CCTTATTAT ATTTATATA TTGTTGATAT GGTGAATTT ATGTATGCCA TAAATTATT 120  
TGTTTCTATT TAAA 134

SEQ ID NO:5390

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06423

SEQUENCE DESCRIPTION:

GATCAACGTC CTCCATGAGC ATGGNATAGT CCACCGTGAC ATTAAGGTG CCAATATCTT 60  
CCTTACCTCA TCTGGTTTAA TCAAACGGG AGATTTGGA TGTCAGTAA AGCTCAAAA 120  
CAATGCCAG ACCATGCCTG GTGAAGTGAA CAGCACCTG GGGACAGCAG CATACATGGC 180  
ACCTGAAGTC ATCACTCGTG CCAANGGAGA GGGCCATGGG CGTGCAGCCG ACATCTGGAG 240  
TCTNTGGGTG TGTTGTCATA GAGATNGTGA CTTGGCANGA GGCCTTGGCA TGAGTATGAG 300  
NAN 303

SEQ ID NO:5391

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06424

SEQUENCE DESCRIPTION:

GATCCAGAAG AAGTGACCTG AAGTTTCTGT GCAAACTNC AACTAGGCA ATGCCATTTC 60  
AATGCATTAC TAAATNACAT TTGTAGTTCC TAGCTCCTCT TAGGAAAACA GTTCTTGTGG 120  
CCTTCTATTA AATAGTTTGC ACTAAA 147

SEQ ID NO:5392

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06425

SEQUENCE DESCRIPTION:

GATCAATTG ACAGACAGAT GGNGTGTATG CCCCTCCAN GTTGTACTTC ACACACACTC 60  
ATAACTTTCC AAATGAAGCC CCACAGTATA GCGCATATTT TNGATATTTT TGTGAATNCC 120  
ANNAGGAN 128

SEQ ID NO:5393

SEQUENCE LENGTH:122

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06426

SEQUENCE DESCRIPTION:

5 GATCCCTAGG AGCTGNCCTN CTTCCAGCCA NTGCCAGGAA CCAGCACTCC ATGAAGATAA 60  
 ACTCTGGGCC CGACCACCAG CAGGNCCTGA CGACCTGAGG TGACCCTNGG CCTTTCCCCC 120  
 NN 122

SEQ ID NO:5394

SEQUENCE LENGTH:57

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06427

SEQUENCE DESCRIPTION:

15 GATCACAAAT TTTGATATGT GCTATACAGG AAATAAAGTG TTATGATTGA GAATAAA 57

SEQ ID NO:5395

SEQUENCE LENGTH:359

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06428

SEQUENCE DESCRIPTION:

25 GATCTGAAAT CTTCACTAGG TTGATGTGGT TTCCTCTGCA GTGATTTTCC TAGGAAGTTC 60  
 AAATTGACA GCGAGTTCAG CTCAGCTGTG GCCCTCTGCC CTTCCAGCTG TGCCTAGCAA 120  
 GCAAAACCCA GGNAAGAAGC AGTNGCCTCC TGGCCTTACA TACAGAATGC CTGGACAAGA 180  
 GAGAACTTGC TCGGNCCTGC TTTGTATTTT AAAACACAGC TTGNGAGTTC AGAGTTGGTG 240  
 GTTTGCTCAG TTAGCGGTTG TTANGNTGGC TTGAAAAGTT TTCATTATGA TACACTGGGT 300  
 30 ACCCTGGGCT TNGAATGTTN NCAACTTNGG NNNATCTNAT GGTTACCTNT GATTANNAN 359

SEQ ID NO:5396

SEQUENCE LENGTH:246

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06429

SEQUENCE DESCRIPTION:

40 GATCTACCCA CCTCAGCCTC CCAAAGTGCT GGGATTACAG GCATGAGTCA CCACGCCCGG 60  
 CCCTGNTTAT CAATCTTCAA TATTTTGTAT TTTGAGCACT TTGTTGGATT TGTATTATAG 120  
 CACATGTATA CATTGTTTTA TTATAATATT GTGTGTAATT TATTTCTGAT TAATTTTATA 180  
 TCCTTCCTTC ACATTTCAAA TACTTCTAAT TAAAAGCAGA CTGTTCAAAA AANNNNNGNN 240  
 NGNNNN 246

SEQ ID NO:5397

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06430

SEQUENCE DESCRIPTION:



5 GATCTGGCTG AGGGCTCAGG ACACAGGCCC AGCCACCCCC AGGGGCCTCC ACAGNCCGCT 60  
 GCATGACAGC NATACAGTAC TTAAGTGTCT GTNTAGACAA CCAAAGANTA AATGATTCAT 120  
 GGTTTTTTTT AAA 133

10 SEQ ID NO:5398  
 SEQUENCE LENGTH:119  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06431  
 SEQUENCE DESCRIPTION:  
 GATCCTGAAC CAAATTTATA GCAATATAAT TAGTGTNTNT CTAAGGCATT ACTCATCAA 60  
 15 AAAATTGCTG CAGTCTTTAC AGTTGAATAA ATAAAAACAA CTGCATAAAT ATGCCCAAA 119

20 SEQ ID NO:5399  
 SEQUENCE LENGTH:80  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06432  
 SEQUENCE DESCRIPTION:  
 GATCACCACC TGTAGAAACT GTTCTTCCTC TGTGAACTA ACGGCCTGCT GGTAATAAAA 60  
 25 GTAGCTACCA TTTCTTGAAA 80

30 SEQ ID NO:5400  
 SEQUENCE LENGTH:130  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06433  
 SEQUENCE DESCRIPTION:  
 GATCACTCAT TGCTAATTTT GTCCTGTACA GCTTATGTAA TATTNNATG GTGGAGACGG 60  
 ACTCTGTGTG CTCAGGGCCT TGTCTCTAGG AAGATTTTGT CAATTCCTAAA TACAGTTTGT 120  
 35 AAGATTCAAA 130

40 SEQ ID NO:5401  
 SEQUENCE LENGTH:379  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06434  
 SEQUENCE DESCRIPTION:  
 GATCAACTGA TAAGTTGCCT TATGTCACCA TGGGTTCTGG CTCCTTGGCA GCAATGGCTG 60  
 45 TATTAAAGA TAAGTTTAGG CCAGACATGG AGGAGGAGGA AGCCAAGAAT CTGGTGAGCG 120  
 AANCATCGCA GCTGGCATCT TCAACGACCT GGGCTCCGGA AGCAACATTG ACCTCTGCGT 180  
 CATCAGCAAG AACAAAGCTGG ATTTTCTCCG NCCATACACA GTGCCAACA AGAAGGGGAC 240  
 CAGGCTTGGC CGGTACAGGT TGTGAGAAAAG GGGACTACTG CAGTCCTCAC TGTGAAANTN 300  
 50 ACTCCTCTNG AGATTTGAGG TTNTTGGAAAG AAACANGTCC AAACAATGGA CCACTTCCTG 360  
 AATTGGCATC ANTGGTNNN 379

55

SEQ ID NO:5402

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06435

SEQUENCE DESCRIPTION:

GATCTGTAGT AAACAATGGT GATTTTATTT ATTTTNACTC TCTGGAAAAG GAGATAATAC 60  
 AATTCCAGAA AGTGAAGTCA TATTTCTAAG GTTAAGATTG CCTTTTATTG CACCTAGAAT 120  
 AGTGCTATGC ACAGAGCGGG TGCTTGAGTT GTTGTCTGTT TNTGTTTGT TTTTAAATGT 180  
 AAAGTGGTAA ATNTTGTGCT TATCTTCAAG GCTAGCTTAN GTATAAAATN GTTTTTTAAA 240  
 CACTTGNAAG ATTAAGGAT TTGTTTAAAN NANCANNAG GGGNGGTGGT TNGGTNN 297

SEQ ID NO:5403

SEQUENCE LENGTH:294

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06436

SEQUENCE DESCRIPTION:

GATCAATAG TTGCATAGCA GTATATGTNA ATTTGTGTGT TTTTAGCTGT GACACAGCTG 60  
 TGTGATTAAA AGGTATACTT TAGTAGACAT TTATAACTCA AGGATACCTT CTNATTAAAT 120  
 CTNTTCTTAT TTTTGTACTT TATCATGAAT GCTTTTAGTG TGTGCATAAT AGCTACAGTG 180  
 CATAGTTGTA GACATGGTAC ATTCTGGGGA AACAACATTT NTNTGTNGCC TTTACTGTTT 240  
 GATATACCAN ATNANAANAA AATTGGGTCT NATTNCTNAT GCTGGGGCAC CNTN 294

SEQ ID NO:5404

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06437

SEQUENCE DESCRIPTION:

GATCCTCACC NCTTGAATT AAAATNCTTG TTAGCTCAGG CAAGCCTACA GTTTGCAACC 60  
 AAGTCTAGGG TTTCTGTAA TCAANGNCGT TTTTCANTT AAA 103

SEQ ID NO:5405

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06438

SEQUENCE DESCRIPTION:

GATCTGCTGG ACATCATGCC CCATGTCATA GAGAATAAAG CTGATGATTG TACCAGTAAA 60

SEQ ID NO:5406

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06439

SEQUENCE DESCRIPTION:

5 GATCATACCN ATAAAAATAA TNCCAAACAC CAAATATGAA TTTTATGAAT GTACACTTTG 60  
TGCTTNACAT TAAAAGAAAN AACACACAA A 91

SEQ ID NO:5407

SEQUENCE LENGTH:108

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06440

SEQUENCE DESCRIPTION:

15 GATCGTCGCC TGCTGGCTAA GACCAGGGAG CTAAAACTT NAGGAAGGGA ACCTGCCTGG 60  
TTGGNTGCTA CTTCTGATTC ATTGTCCCTN TCCCTNTCAT AAGTNCCN 108

SEQ ID NO:5408

SEQUENCE LENGTH:321

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06441

SEQUENCE DESCRIPTION:

25 GATCTTATGT TAAAGAGAT TCTGTTATTA GCACCATGAA CTCGTACTAT GAAATNTTA 60  
AGCCTTTTAT TTTCTAACT ATATTACTGT AGGACTGGAT ATTAGGTGTC ATATAGGAAA 120  
CACAAAAGTT ATTGCTGTTT GCTAAAGCAA AGTAGCAGAA AATTTTGTAT ATGCAAAACT 180  
GTTGAAGGNC CATAGAGAAA TGTGTACTAC TGACGGGGCT TTTACTAGGC TTCCTGCGTG 240  
TGTANAAGTC GAGGTTTGG CITGGCATTG AGGGTGACAT GGTGGTGCTA AATTGTTTC 300  
30 CNTTTAAAAG GCNTTCTATT N 321

SEQ ID NO:5409

SEQUENCE LENGTH:390

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06442

SEQUENCE DESCRIPTION:

40 GATCCGCAGC AGAAGCTCTT CCCTTCTGTA TCCTATGTAT GCAGTGTGCT TTNCTTGCC 60  
AGCTTGGGGC ATTCTTGCTT AGACAGTCAG CATTTGTCTC CNCCTTTAAC TGAGTCATCA 120  
TCTTAGTCCA ACTAATGCAG TCGATACAAT GCGTAGATAG AAGAAGCCCC ACGGGAGCCA 180  
GGATGGGACT GGTGCTGCTT TGTGCTTTTC TCCAAGTCAG CACCCAAAGG TCANTGCACA 240  
GAGACNCCGN GTGGGTGAGC GCTNGCTTCT CAAACGGNCG AAGTTGCCTC TTTTAGGNAT 300  
CTCTTTTGA ATTTGGGAGC ACGATGNCCTC TNGAGTTGA GCTATTAAAG NACTNCTTGG 360  
45 CACATTAAANA AAANANAAAT GNGGTNNGNN 390

SEQ ID NO:5410

SEQUENCE LENGTH:197

50 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS06443

SEQUENCE DESCRIPTION:

5 GATCCCAGGG AAATATCAGC CTTGGGCAAC TGCAGTGACC AGGGGCACCG GCTGCCCACA 60  
 GGGAAACACAT TCCTTTGCTG GGGTTCAGCG CCTCTNCTGG GGCTGGAAGT GCCAAAGCCT 120  
 GGGGCAAAGC TGTTTTTCAG CCACACTGAA CCCAATTACA CACAGCGGGA GAACGCAGTA 180  
 AACAGCTTTC CCACAAA 197

10

SEQ ID NO:5411

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS06444

SEQUENCE DESCRIPTION:

GATCTTCAAG TGAACATCTC TTGCCCTGAT TGAAGGCTTT GCCACATGCT GGAAGGCCCC 60  
 CTCCCAGGAA GATGGGGGTC ATTAAGGAA ACTNAACATT GAAA 104

20

SEQ ID NO:5412

SEQUENCE LENGTH:244

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25

CLONE:HUMGS06445

SEQUENCE DESCRIPTION:

30 GATCACCTGA ACAATCTAGA TGTGGACAAA ACCATTGGGA CCTAGTTTAT TATTTGGTTA 60  
 TTGATAAAGC AAAGCTAACT GTGTGTTTAG AAGGCACTGT AACTGGTAGC TAGTTCTTGA 120  
 TTCAATAGAA AAATGCAGCA AACTTTTAAT AACAGTCTCT CTACATGACT TAAGGAACTT 180  
 ATCTATGGAT ATTAGTAACA TTTTCTACC NNGNNGTCCG TAATAAACCA TACTTGCTCG 240  
 TAAA 244

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SEQ ID NO:5413

SEQUENCE LENGTH:139

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06446

SEQUENCE DESCRIPTION:

40 GATCTNAGAA AANGCACCAC GTNAGCTTAC TAANTNATAA TATCTGTTTC TACTACGGAT 60  
 TTAGGCAACA GGACCTGTAC ATTGTCACAT TGCATTATTT TTCTTCAAGC GTTAATAAAA 120  
 GTTTTAAATA AATGGCAAA 139

45

SEQ ID NO:5414

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06447

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SEQUENCE DESCRIPTION:

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5 GATCGGGGTC CATGGGCCCA CCACCCCTG CAAGGAGGTC TCCATGAAGC ATGTAGGCAA 60  
 CCAGCAATAC AACGTCACAT ACGTCGTCAA GGAGAGGGGC GATTATNTNC TGGCTGTGAA 120  
 GTGGGGGGAG GAACACATAC CTGGCAGCCC TTTTCATGTC ACAGTGCCTT AAAACAGTTT 180  
 TCTCAAATCC TGGAAA 196

10 SEQ ID NO:5415  
 SEQUENCE LENGTH:69  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06448  
 SEQUENCE DESCRIPTION:  
 15 GATCCATTAA TCTGCTAATT GGTTCCTAT GAAATCACAT TGTCTGTTAT TAAAGCTTTT 60  
 TACCATAAA 69

20 SEQ ID NO:5416  
 SEQUENCE LENGTH:119  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06449  
 SEQUENCE DESCRIPTION:  
 25 GATCTAGTAA AGTGTITTAG AACCCCTTTT TATCCCATGC ACCATTCACT AAACATAAAA 60  
 ATCACAATTC TGCTAATGTC ATTTGGAAC TCAAAATAAA TATCTGTCT AAAAACAAA 119

30 SEQ ID NO:5417  
 SEQUENCE LENGTH:308  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06450  
 SEQUENCE DESCRIPTION:  
 35 GATCATTGCA TGAATAGAAT CAAGGAGCTC ACTCAGAGTG AACTTNAATT ATNACTTTNN 60  
 AGGCTCATTT GTACTCTCTT CCCCTCTCAT CGTCATGGTC AGGCTCTGAT ACCTGCTTTN 120  
 AAAATGGAGC TAGAATGCTT GCTGGATTGA AAGGGAGTGC CTATCTATAT TTAGCAAGAG 180  
 ACACTATTAC CAAAGATTGT NGGTTAGGCC AGATTGACAC CTATTTNTNG NCMNTATGCG 240  
 TATATTNCC TGTGCTATAT ATGAAAANTA ATTGCATGAT TTCTCATTCC TGNGTCATT 300  
 CTCAGNGN 308

40 SEQ ID NO:5418  
 SEQUENCE LENGTH:293  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 45 CLONE:HUMGS06451  
 SEQUENCE DESCRIPTION:  
 GATCTGAAGG GAGAAGGTGA TATTCATGAA AATGTGGACA CAGACTTGCC AGGCAGCCTG 60  
 GGGCAGAGTG AAGAGAAGCC CGTGCCTGCT GCGNCTGTGC CCAGCCCGGT GGCCCCGGCC 120  
 50 CCAGTGCCAT CCAGAAGAAA TCCCCCTGGC GGCAAGTCCA GCCTCGTNTT GGGTTAGCTC 180

55

TGACTGTCCT GAACGCTGTC GTTCTGTCTG TTTCTCCAT GCTTGTGAAC TGCACAACTT 240  
GAGCCTGACT GTACATNTT TGGATTTGTT TCATTANAAA GAAGCACTTT AAA 293

5 SEQ ID NO:5419  
SEQUENCE LENGTH:180  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS06452

## SEQUENCE DESCRIPTION:

GATCCTGGNA CATTCATAA GCTTGGGTAA AAAAATTTT TGTATNNTC CATGCACAAT 60  
AAGGGAATG TTTAATTGG CTTGNGCCT CTTGCTTTAC AACAGTTCG GCCTCAAGTT 120  
ACCAGGTAGC CTGAACCTTG NTTTTATTT ACCATTAANT TGCTTAATA CCATNGTAAA 180

15 SEQ ID NO:5420  
SEQUENCE LENGTH:99  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
20 CLONE:HUMGS06453

## SEQUENCE DESCRIPTION:

GATCACTGA GCCCANGTTG AGGTTGAGGC TGCAGTGAAC TATNATTGTA CCACTGCACT 60  
TCAGCCTGGG CAACAAAGGA AGACCCAGT TCTGGGAAA 99

25 SEQ ID NO:5421  
SEQUENCE LENGTH:209  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
30 CLONE:HUMGS06454

## SEQUENCE DESCRIPTION:

GATCCCTGCA TTNCCTGAAG ATNTTTAAAC GTGAGAGTNT GGTAGGCAAA GCAGTCTGAG 60  
AAAGAAATAG GAAATGCAGA AATAGGTTTT TTTTGGTTGC ATATAATCTT TGCNCTTTTT 120  
AAGCTCTGTG AGCTCTGAAA TATATTTTNG GNTTACTTCA GTGTGTTTGA CAAGACAGCT 180  
TGATATTNCT NTCAAACAAA TGACTIONGN 209

35 SEQ ID NO:5422  
SEQUENCE LENGTH:246  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
40 CLONE:HUMGS06455

## SEQUENCE DESCRIPTION:

45 GATCCAGTGG ACAAAGAGG GGAAACTATG GGAGTTCCCA ATTAACAATG AAGCAGGTTT 60  
TGATGATGAT GGTTCAGANT TTCATGAACA TATATTTNTG GAGAAACACC TGGAGAGCTT 120  
TCCAAAACAA GGACCAATTC GCCACTTCAT GGAGCTGGTG ACTTGTGGCC TTTCCAAAAN 180  
CCCATATCTT AGTGTAAAC AGNNGGTTGA NCACATNGAG TGGTTTAGAN ATNTTTTNA 240  
TGNNA 246

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SEQ ID NO:5423

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06456

SEQUENCE DESCRIPTION:

GATCTGCTCA GAAAGGAAGA GGCAGGCGCC AGGGNGAACC CCCTTCCGTG NTTTGTAAAC 60  
CTCCCTNTAA GGTGAAGCCC TTTNCTTGC TAAAACCGGN AATTN 105

SEQ ID NO:5424

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06457

SEQUENCE DESCRIPTION:

GATCCTGGGG GTCGTGGCTA CCCCCTCCTC GTGGCCGNNC TCCTTGCTGC TCCTGTCAAT 60  
AGTGAGCTTG TGCCGTCCCN CTAGGATGGG GGCATGGCCN TGGGCTGCCA GATGCCCACA 120  
GCACCCTGGC ATGACCTNCC ACCTNGGGTT CCANACCGN 159

SEQ ID NO:5425

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06458

SEQUENCE DESCRIPTION:

GATCACCTAT CCCCTGTTTC AACAAATGAAT AAGGAACAGC AAATNTTTGA GACGTGCCCT 60  
GAAACTGAAC AGAGATGCAC TCTCCAGTGA CTCCCAGCA AACACAAGGT GCAGCAGGGT 120  
CCCAAAGGTA GCTGGNTGGC TGANCTGCTG GNTATGGGAG ATACATGACG CGAAGACGGN 180  
TTTNACATCC ACAGGCGCGT NTTNANGAAA N 211

SEQ ID NO:5426

SEQUENCE LENGTH:66

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06459

SEQUENCE DESCRIPTION:

GATCCACCAC AGGGTTAGGG GACAGGAAGC CTGTTCTATT CTCAATAAAT CTTACAAAAT 60  
TCCAAA 66

SEQ ID NO:5427

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06460

SEQUENCE DESCRIPTION:

GATCATTATT TCCATTCTTA ATGTGAAAAA AAGTAATTAT TTATACTTAT TATAAAAAAGT 60  
 ATTTGAAATT TGCACATTTA ATTGTCCCTA ATAGAAAGCC ACCTATTCTT TGTTGGATT 120  
 CTTCAAGTTT TTCTAAATAA ATGTAACCTT TCACAAGAGT CAACATTAAA AAATAAATTA 180  
 TTTAAGAAA 189

SEQ ID NO:5428

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06461

SEQUENCE DESCRIPTION:

GATCTAGACA TGCCTTAGGT AACTGCAGAA ATAGCAAATT AAATNATTAA TGAGCTTATT 60  
 AGTCATAGTA AACATACAGA TTCCTANTTC TATGACAGTG TACATNTATG ANAATAAATG 120  
 ATGAAAAAAG AACTATAGTA TTTTAAAAA TATGCTTTTA TTTTATTNC ACATAGTGNA 180  
 AAGTTCTACA NAN 193

SEQ ID NO:5429

SEQUENCE LENGTH:270

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06462

SEQUENCE DESCRIPTION:

GATCACATTT CTGGGAAGAT GAGANCTNNT TTCCAGACCA GCATCCAGTG GCCATCAGGT 60  
 CTTGTGGCCC AAAGGCTATG CTTGCCTCCG GCTGAGTGCC TGGNATAGGC CTTTNCATG 120  
 TCTCCCCAAG GCTGGGGTGC TGAGCCTGCC TTCCTCACCA CCTAGCCATA GTCTCAAACC 180  
 TGTGGGGAAG GNGGNNTTCT CCCTGCCCCG GAAGAGGACA GATAACTGAT TTCCGTTCTT 240  
 TTGACTGTGT TTTAAAAATC TCTTTCTAAA 270

SEQ ID NO:5430

SEQUENCE LENGTH:162

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06463

SEQUENCE DESCRIPTION:

GATCTCCTGG GACTCCGAGC AAGGCCTGCA CGAGAGAGGG CTGAAAGGCT GCTGGGGCTG 60  
 CCACCTCGCT ATTCCCGCAT AAGCATCTGC CCCCAACCCC TTGACCTTC ATCTGATGGA 120  
 CATTTTATA CAGAAAACAA TAAAGATTTC CCTCTCAGCA AA 162

SEQ ID NO:5431

SEQUENCE LENGTH:83

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06464

SEQUENCE DESCRIPTION:

GATCAGTTGT ACTAGAGGAA CATCATAGAA GAGAAAAATC CAACTCTTTA TATTAATAAT 60



NAATACAATA AGAAAATTGC AAA

83

5 SEQ ID NO:5432  
 SEQUENCE LENGTH:168  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06465

10 SEQUENCE DESCRIPTION:  
 GATCTGCAAG CCCTGCTGTA CAAGAAAATC ATTAAGGAAC ATTTGGAGAG TTAGCTACTA 60  
 GCTGCCTAAG TGTGCACTTT CAATCTAACT GTGAAAGAAT CTTCTGATGT TTGTATTATC 120  
 CTNCTTATAT TATATTANCA AAATAAATCA AGTTGTGGTA TAGTCAAA 168

15 SEQ ID NO:5433  
 SEQUENCE LENGTH:357  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06466

20 SEQUENCE DESCRIPTION:  
 GATCCACCCA CCTTGGCCTC CCAAGGTGCT GGGATTGCAT GCATGAGCCA CTGCACCCAG 60  
 CCAAGATACA TTGTTGACGT GAAAAAAAAA TTCAAGATA TATAGAACAG TGTAACATG 120  
 CATCCAATTG TGTTTTCAN GGAGAAAATA ATGTATACTT GTATTGGTTT ACGTATGAAA 180  
 CAAAANTATC TAGAAGGATG AATAAAAATC TAGTAAGTGA TTNTACACTA GGGCAAAATTG 240  
 GAAACAANTG GGNGACTTCA TGGATGACTT TTTTATATT GTAAAGTGGG NGTGANTGTN 300  
 TTACTTATTC CACCAGTTAN GTTGAAACCT TTNNNNGGNA GGTNGTGGT GNTTNTN 357

30 SEQ ID NO:5434  
 SEQUENCE LENGTH:175  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06468

35 SEQUENCE DESCRIPTION:  
 GATCAGATGG CTTAGAGAAA TTNCTGGAAT ATTCACATTC GAAGATTCCT TATTAATNAA 60  
 TGTCTTTNAC TTAAATCTAA CCAAAAACTG CAACATTATT CTTTGTACAT TTNCATTATA 120  
 TAGTGTTAAC AAGCTTAGTT GCANACAANT AAAATACTTA AGCTATTTGT TTAAG 175

40 SEQ ID NO:5435  
 SEQUENCE LENGTH:218  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06469

45 SEQUENCE DESCRIPTION:  
 GATCTGGTGA AACTNGCTAA ACGNCTCAAG AAGGAGAAAAG TTAATNTTGA CATTATCAAT 60  
 TTTNGGGAAG AGGAGGTGAA CNCAGAAAAG CTGACAGCCT TTGTAAACAC GTTGAATGGC 120  
 AAANATGGAA CCGGTTCTCA TCTGGTGACA GTGCCTCCTG GGCCCAAGTTT GGCTGATGCT 180  
 NTCATCAGTN CTCCGATTTT GGCTGGTGAA GGTGGNNN 218

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SEQ ID NO:5436

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06470

SEQUENCE DESCRIPTION:

GATCACAGTG GGCAGCCGGC ACCCNGCACC ACTTTGGCGA GCGTCCTGCT TCCGNCCTCG 60  
 CCCTCATCTA CGCTGCTCCG CTTTCCTCAG ACCCCTTTTT GCCGTGCAAA GGGAATTCTT 120  
 GACATTAAAT AAAAGGTATC CAGNTTGCAG AAA 153

SEQ ID NO:5437

SEQUENCE LENGTH:310

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06471

SEQUENCE DESCRIPTION:

GATCAGTTGG GTGCACGAGT GGGTTACATC GAACTGGATT ATAGGAAGCT TATAACAAGA 60  
 ATGGAAGATT CTAAATAAC TCACTTTCTT TGGNATCCAG TAACAGTAGA TGTTCAAAAT 120  
 ATGTAGCTGA TTAATACCAG CATTGTGAAC GCTGTACAGC CTTGTGGTTA TTAATAAGCA 180  
 AGTTACTACT AGCTTCTGAA AAGTAGCTTC ANAATTAATG GTTATTNTA NACTGCCCTT 240  
 CCNTGGCTGN TACTTTNCCC TAAGNTNAAT CTNCGAGAAT CTGAAATGNT TNCTNCANTT 300  
 NTCAGGGAGN 310

SEQ ID NO:5438

SEQUENCE LENGTH:67

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06472

SEQUENCE DESCRIPTION:

GATCACATTN GATNAAAGAG CAAAAC TTGT TAAGTCCAAA ATAAATTCTT ACTGTTTATA 60  
 TCCTAAA 67

SEQ ID NO:5439

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06473

SEQUENCE DESCRIPTION:

GATCCACAGA AGGTCCTGGT GGTATTGTGA ACTTTTGTGA AGGCATTTT TTATATATAT 60  
 TTTTGTGCAC ATTTTTTTT ACGNTTCTT AGAAAACAAA TGTATTCAA ANGTATATTG 120  
 ATAGTCGANC AATTCATATA TTGAGGTGG AGCCATATGA ATGTCAGTAG TTTATACTTC 180  
 TCTATTATCT CAAACTACTG GCAATTGTGA AAGCNATATA TATGNTATAT AAAGGTGATT 240  
 GCNGCNTTNC ANTGTIAGCC CCNGTGNN 268

SEQ ID NO:5440

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06474

SEQUENCE DESCRIPTION:

GATCCAGGCT CAGAACTTCT TCTCCAGCTT CACCCTGATG AAGCTGAGGC ACTCCTCCGC 60  
TCTGGGTGGG GCCAGCCTAG GGGCCAGGCA CATCGGGCAC CTNCTCCCA TGGACTATAG 120  
CGCCAATGCC ATTGCCTTCT ATTCCTACAC CTNTTCCTAG GGGGCTGGTC CCGGGCTCCA 180  
CCNGGTCAA GCTCAGTGA CACTGGGTCT GAAAGGAAGG AGTCTTTTGN TTCCTTTCTC 240  
CTNTTACAN GAACAAACAT AGATGGTAAA TAAATNNACT TTNTCCNCT CCCCAGAANN 300  
NAATNN 306

SEQ ID NO:5441

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06475

SEQUENCE DESCRIPTION:

GATCAGCTAC ATAAACGGC CTGAGTGCTG TTTTAAACAG CNCTTGGGTG ATGGTACAAC 60  
ATNACTTTTT AAGATAATNA NGTAGTAAAA GTTCTAGTG GAAACATGAA A 111

SEQ ID NO:5442

SEQUENCE LENGTH:255

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06476

SEQUENCE DESCRIPTION:

GATCCCAACA TTTTGGCAG TGAGCATTAC GATGTTANCC GTGGGGTGCA AAANATCTGA 60  
ATAAAATTA CAAAAGGAGA ATTCAGACAG ACCAACCTGG GTNATGTGTT TCAAGCTCTG 120  
CCCAGGAGC TTGAATGTCT NTNCTNGTG GCAGGAGCAT TCCTAGAGAC TGGTGCATCA 180  
GGTTTTATGT TGTGTCTCT CTGCTCCAGC TCACCNTNA AANCTCTNCC CTNGGATGTT 240  
GGAATCANA TTCTN 255

SEQ ID NO:5443

SEQUENCE LENGTH:313

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06477

SEQUENCE DESCRIPTION:

GATCCCATAA AGCTACGAGG GGGACGGGAG AGGGCAGTGC AATGGGAAGT AAAGAGATAT 60  
TTNCCAGTAG GAAAAGCAAT GCTTCTTGT CTTTAGACTC AAATGCTTAG GGAACGTTTC 120  
ATTTCTCATT CATGGGGAAA GGCAGCCTCC TTAATGTTT NCTGAAGAGC GGTAAATCT 180  
AGAAGCTTAA GANTTTNCAG TTCCTCAAT AACCATGATG ACCTGAAGTN CACCTATCCC 240  
ATTTAGCAT CTNCTTGTTT TNCCATCTC TNCCTTTCCA ATTTNCTTA TNCTGCTGTA 300

ATATTTTGT AAA

313

SEQ ID NO:5444

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06478

SEQUENCE DESCRIPTION:

GATCAGCTCA CACCCAGTCT CTCACAAGTN TTCATTCCAT AAAAGTGGTT GACTAAAGTG 60  
 AATATGTCCA TAGTGGGGTC TTTTAATCCC TCTGGTCTTA CCANGGGTTA GANGTCTNTN 120  
 GGTNTAACT TTTCCATATT GTTAGAACAT CATGGNGACA TCATGTNCAT CTGTTCAAAA 180  
 TTACAAGAGG CTTTNCNAAG CTCTACCATG CTTTGAN 218

SEQ ID NO:5445

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06481

SEQUENCE DESCRIPTION:

GATCATTGTG AAGGCAGGGG AATGTATGTG CACATCTGTT TTGTAAGTGT TTAGATGAAT 60  
 GTCAGTTGTT ATTNATTGAA ATNATTTTAC AGTGTGTGGT CAACATTCT CATGTNGAAA 120  
 CNTTAAGANC TAAAATGNTC TAAATATCCC TTGGACATTT NATGTCTTTC TTGTAAGGCA 180  
 TACTGCCTTG TTTAATGGTA GTTTTACAGT GTTCTGTGGCT TNGANCAAAG GGGCTTAATT 240  
 ATTGATGNNT NGGATN 256

SEQ ID NO:5446

SEQUENCE LENGTH:344

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06482

SEQUENCE DESCRIPTION:

GATCCGGAAG CGAATTCATC TCCGAGCTGA GGATNCCTTG TTTTNTTTG TCAACAATGT 60  
 CATTCCACCC ACCAGTGCCA CAATGGGTCA GCTNNACCAG GAACACCATG AAGAAGACTT 120  
 CTTTCTCTAC ATTGCCTACA GTGACGAAAG TGTCTACGGT CTGTGAAGCT GCTGCCCTG 180  
 AGCTGGAGGG GGGTCTCATT CTACAAAGAG AGAGGTGGCC CCCCTTTCTT GACCTGCTCC 240  
 TCCTTCAAGC TTAAACANCA CCTCCTTATT CAGGACCGGC ACTTCTTAAT GTTTTGTGGG 300  
 CTTTCTNTCC AGCTNTCTTT NGGNGGGGTA ATGGGTNGGA GTTN 344

SEQ ID NO:5447

SEQUENCE LENGTH:334

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06483

SEQUENCE DESCRIPTION:

GATCTTTCTA GGAGGGAGAC ACTGGCCCTT CAAATCGTCC AGCGACCTTC CTCATCCACC 60

CNATCCCTCC CCAGTTCATT GCACTTTGAT TAGCAGCGGA ACAAGGAGTC AGACATTTTA 120  
 AGATGGTGGC AGTAGAGGCT ATGGACAGGG CATGNCACGT GGGCTCATAT GGGNCTNAGA 180  
 GTAGTTGICT TTCCTGGCAC TAACGTTGAG CNCCTGGAGG CACTGAAAGTG CTTAGTGTNC 240  
 5 TNGGAGTATT GGGGTCTGAC CCCAAACAAC TTTCAGNTTC NNTAACATAC TGGGNCTTGA 300  
 CTGTTTTNTC TNGGTNCCNN ATGGGTCCTG GTTN 334

SEQ ID NO:5448

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06484

SEQUENCE DESCRIPTION:

15 GATCTAGAAA GCCCTAAGCT CTCACCACTG GCTACCTTGA GCCTCTACAG AATNAGGAAG 60  
 TAAAGTCTAA GGCAGTAAA 80

SEQ ID NO:5449

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06485

SEQUENCE DESCRIPTION:

25 GATCGCANCT CCGAAGACGG AGAGGAGGGA AATGGGGCCC TTTCCTCTCT ATTGCATCCC 60  
 CCTGCCCGNC TCCTTCCCG CACCCACGTG CCCTAGATTC ATGGCAGAAA ATGNCCAAAT 120  
 CCNGGTATT TGTGTANAT ANTTAAN 147

SEQ ID NO:5450

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06486

SEQUENCE DESCRIPTION:

35 GATCATTGTA TATNACACAC ATGTATCAAA GTATCACATG TACTCCAAAT GTTTGTACAA 60  
 CTATNATATA TCATTAAAAA AATACAAANT AAAAAATGTA GCTATGAAA 109

SEQ ID NO:5451

SEQUENCE LENGTH:274

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06487

SEQUENCE DESCRIPTION:

45 GATCCAGTGT GCAGAAGAGC CAGCAGGGAA CCGGAAGCTC TNATGTCAAG GCCAGAGCAG 60  
 TTGAGANTGG GNCCAGAGT AGATGCTGAC CTGGGCACTC CACCATCCG GGGCCACCAC 120  
 AGAGATGCCA GCAGGATGCC ACTTTNCCAG CCCGACACAC GGACCTTTNT AAAGANCAGC 180  
 AACAGGCAGG AGAGGCAGCG TNTGNCCAGA TTGTTCCCG TCATTGGGTG GCATNTGTTA 240  
 50 NCTAGCTGNC AAACANCTTC ANCCCGTGTG ATTN 274

SEQ ID NO:5452

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06488

SEQUENCE DESCRIPTION:

GATCACGGCT CTTTTTAAGC CCTGGCAGCA TTTTGGTCCC TGCTCCTTGC CCATAGTAAA 60  
 ACAGCTTGAA ATATCCCATG CAAGAGAGTA GTTTCAGTG GGCAACTCTG CTCTCTATTT 120  
 AAAAGCGTGC ACAATCAAAA GTACTATGCA ATTTTAGGAC AATAAAGANC ATACAGTTTT 180  
 AAA 183

SEQ ID NO:5453

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06489

SEQUENCE DESCRIPTION:

GATCACCAGT GGGCACTAGA TGATGTNGAA GAAGAGCTCA TGGCCAAANA CCTCCACTTC 60  
 GAAGGCATGT TCAAAAAGGA ATTACAGACC TCTATTTTTT GAAGACCGAG CAGGGATTAG 120  
 CTGTGTGAGG AACTTGGAGT TGCACCTAAC CTTGTAACTT TGTTTGGAGC TGGCACCTCT 180  
 TGAAATAAAA AGGGAGGNTG CACGAGCTGG GCAAA 215

SEQ ID NO:5454

SEQUENCE LENGTH:70

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06490

SEQUENCE DESCRIPTION:

GATCAAAAAA TTCAATTNC TACAAGTTCT NCTATCTGAA ATAAATAACA GACTCATTTT 60  
 TGACAATAAA 70

SEQ ID NO:5455

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06491

SEQUENCE DESCRIPTION:

GATCANGNTA GTGGTGTCTG TCAGCTGTCT AAGAGGTTGG AGAATNAACT ACTCAAGATA 60  
 GTCACGAAAA NACTGAAAGT TTNATTTTCC TTTCCATATT TAAN 104

SEQ ID NO:5456

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06492

SEQUENCE DESCRIPTION:

5 GATCCCAGTT ATCCTTGNAT CCATGTAATT TCAGATGAAT TATTAAGCAA ACATTTTAAA 60  
 GTGAATTCAT TATTA AAAAC TATTCATTTT TTTCTTTGG CCATAAATCC NCTAATTNTC 120  
 ATTA AAAATTC TAAGGTCATT TCAACTGTTT TAAGCTGTAT TNCTTTAATT CTGCTTACTA 180  
 TTTTCATGGAA AAAANTAAAT TTNTCAATTT TAAA 214

SEQ ID NO:5457

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SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06493

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SEQUENCE DESCRIPTION:

GATCCAGAAT AACTTCTCCC ACTCATATCT NCAGTTCACC NAATGAAATN AATGGATAGC 60  
 AAGAGCCCNT TGTTCACAGG ACTTTAAGGC AAAATATTAA AANTN 105

SEQ ID NO:5458

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SEQUENCE LENGTH:56

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06496

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SEQUENCE DESCRIPTION:

GATCCTTTTA TAAATTTAAA AAATTTAATG TTAATAAAGC GAGGTGTAAT TGTAAA 56

SEQ ID NO:5459

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SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06498

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SEQUENCE DESCRIPTION:

GATCCGNGAA AGGCTGAAAG GCCAGGAAGA CAGCCTAGCC TCTNCAGTGG ATGCTGCCAC 60  
 CGNACAAAAG ACCTGTNACT CCGACTGAGG CATGNCCTGC CCN 103

SEQ ID NO:5460

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SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06499

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SEQUENCE DESCRIPTION:

GATCNTGAT NTAGAAGAGG TNACATTGCA CAATGTTTGA ATAAGGAAAC TATTGGAAAG 60  
 TTTTCCAAG CTGACATTGC AGAAAAAGCT TTGNAAAATT CCTCAGAAAC AGAAATACCT 120  
 ACTGTACCG TTTAGCTGA TGAAGANTTC CTTCCCTNCA AAGAAAATAC ATTTGACCTG 180  
 GTGGTNNGCN 190

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SEQ ID NO:5461

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SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06500

SEQUENCE DESCRIPTION:

GATCCCGCCC ACTCAGAAAA GCGAGAAGG CTTTGTAATT TTCTACATGA ATCAAACACA 60  
GAAACAACTT TTGGAGAAAT TAAATTCTGA GTGTNACTTC TGAAA 105

SEQ ID NO:5462

SEQUENCE LENGTH:83

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06501

SEQUENCE DESCRIPTION:

GATCTTCTTC ACACCAAGCT CTGTTTACAT TCCGAGAGTT GTCATGAAGA AAGTNCNTNT 60  
CAATAAGNTT TTGGAATGTT AAA 83

SEQ ID NO:5463

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06502

SEQUENCE DESCRIPTION:

GATCAGGACA CGAGGAAGAG TAAATGTGAG ACAGTCAATG TGACTTCTGC GATAAACAGA 60  
TTTTTAAACC CCGAAATTTT GCAAAATTTT GGTGAACCTG ANCTTNCCTC GTTGCATATG 120  
CTGGCACTAT CTGTACCATC ATACANCTGT CTCACATTAA AGCTATTTTC CTGGGGCAAA 180

SEQ ID NO:5464

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06503

SEQUENCE DESCRIPTION:

GATCATCTCC CCTGGCAACG TGACTCTGTT TTTTGTGTGT GTTCCATGC TGACTAGTCC 60  
CCTACTGTTA ATATCACTAC TAATTAGGCT ATAACCAGGT CTTTCCTGGC CTGAGAAATA 120  
TTCTCTTAAA ATNACCTTTG TTTTAATCTC ATTCATGATG TTGATTTTTT TTCAATGTGG 180  
TGCAATATAT ACANTAAAAA TNGTCATANC TAAA 214

SEQ ID NO:5465

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06504

SEQUENCE DESCRIPTION:

GATCTGTCCA GGGAGGTGGC TGAAGAGTGG GCATCTCCCT TAGGGACTCT ACTCAGCACT 60



CCATTCTGTG CCACCTGTGG GGTCTTCTGT CCTAGATTCT GTCACATCGG CATTGGTCCC 120  
 TGCCCTATGC CCCTGACTCT GGATTTGTNA TCTGTAAAAC TGGAGTAAAA ACCTCAGTCG 180  
 TGTAAA 186

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SEQ ID NO:5466  
 SEQUENCE LENGTH:117  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06505  
 SEQUENCE DESCRIPTION:  
 GATCTTTGCT TCCTTCTAT TATGTTTGA CACAACACCT AAAACCAGTT TTGCTGCTAT 60  
 ANTTCTATAC TGTGATTCTG TCTGCNANNT ATCTGTAAAC AAATAAACAT AATAGGN 117

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SEQ ID NO:5467  
 SEQUENCE LENGTH:309  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06506  
 SEQUENCE DESCRIPTION:  
 GATCCAAACC AAAGACTGTA GAACCTGGG GTGTGGCTAA CTGCCCCNTN CNGCACCCGT 60  
 AGCCAGGTCT TCCTGGCCCT TNAGGCTGGG CTGGCGGACA GGCACCTNCC TGTTCCTTAA 120  
 GCTGAAAGCTC CCACACTGTC TTCCAGGGCT GAGGAGATGC TCTCCTTTTC TACTGACCAT 180  
 CTTGATACTT ATTTATACGA GAGNCAGTTG CTGGACGGGG TAGTACTGGG AAGCAGGAGG 240  
 CAGAATGGCT CTGCTGAGCC TNCNACCCAT GGNCAACANC CTAATAAAAC AGANCATTC 300  
 AGAGCCAAA 309

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SEQ ID NO:5468  
 SEQUENCE LENGTH:97  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06507  
 SEQUENCE DESCRIPTION:  
 GATCCCATAC CAGAAGATGA GAAAAAGAA TAAGTGTTCG CTTGTTTTGT GTGTTCTAAA 60  
 TACTTTTTNT AATGAAAAAA TGNTTTTTNG TTTTAAA 97

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SEQ ID NO:5469  
 SEQUENCE LENGTH:67  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06508  
 SEQUENCE DESCRIPTION:  
 GATCATCTAA ACTAAGTCCA GCTGCCTAAT TCTAGATATA TATATATATA TAGAGNTCCA 60  
 CCATAAA 67

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SEQ ID NO:5470

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SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06509

SEQUENCE DESCRIPTION:

GATCTTGGGA AGTATTCCCA AGGAAAACAG TCCTGGGCAC AGTCTCCAAA ATAAATTCTN 60  
AATTTTGGGA AA 72

SEQ ID NO:5471

SEQUENCE LENGTH:467

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06510

SEQUENCE DESCRIPTION:

GATCCCATGG CTTTCTTTAC TGGGCTCTGG GGCCCTTCA CCTGTGTAAG CAGAGTGCTG 60  
AGCCATCACT GTTTCAGCAC CACTGGGAGT CTGAGTGCGA TTCAGAAGAT NACGCGGGTA 120  
CGAGTGGTGG ACAACAGTGC CCTGGGGAAC AGCCCATACC ATCGGGCTCC TCGCTNCATC 180  
CATGTCTATA AGAAGAATGG AGTGGGCAAG GTGGGCGACC AGATACTACT GGCCATCAAG 240  
GBACAGAAGA AAAAGGCGCT CATTGTGGGG CACTGCATGC CTGGCCCCCG AATGACCCCC 300  
AGATTGACT NCAACANCGT GGTCTCATT GAGGNCAACG GGGAAACCCTN TNGGNGACAN 360  
GTATTNAAGA CACNGTNCCC ACCTAGGCTG TGGNAGGGTG AAGGGCGAGT TTTCCCAAGN 420  
TGGTGGGCCT TNGTTNAGAN CTTTGTGTTG NGTTTGGNNC NNGNTAN 467

SEQ ID NO:5472

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06511

SEQUENCE DESCRIPTION:

GATCTTAAC TCTTGACTG ATTTAAAAAG CTAATCAATT TATTAAAGCC AGANATGTNC 60  
TCCTCTGGGA AAGCAATTTC TATCTATTTA TCTACCAATC CCCACTCACA TATATATGTT 120  
TGTNITTACA TAGAGATAGA TGGTTTAAAG GGTTTTCCTA TTGTTAAAT ATTTCCTAAG 180  
ACATTGTGGG NTGGAGACCA CTAACTTAT AAAAAACCA GGAAGTAAA GTTTTNCAAA 240  
TGTTTATACT GTTTAAGGTG TTTATTTATN TAANCCATGC ATGGGGTNNC ATGCATAANT 300  
NNNGNGGTTT AAATTTCACC AGTGANN 327

SEQ ID NO:5473

SEQUENCE LENGTH:70

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06512

SEQUENCE DESCRIPTION:

GATCAAGGAA CTTGTGCCTG TCTATAGATT TTATTTCCCC TGTACAAATA AACTTGGCTG 60  
CAATCCCAA 70

SEQ ID NO:5474

SEQUENCE LENGTH:414

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06513

SEQUENCE DESCRIPTION:

GATCTTGCAA GACTAAAATT GGCCATTAAG TACCGTCAAA AAGAGTTTGT TGCCAGGCC 60  
 AATTGTCAAC AGCTGCTGGC ATCTCGCTGG TACGATGAGT TTCCAGGCTG GAGGAGAAGA 120  
 CACTGGGCAG TGAAGATGGT GACATGTTTC ATAATAGGAC TTCTTTTCC TGTCTTCTCT 180  
 GTGTGCTACC TGATAGTCC CAAAAGCCCA CTTGGACTGT TCATCAGGAA GCCATTATC 240  
 AAGTTTATCT GNCACACAGC CTNCTATTTG ACTTTTTTGT TCCTGNTGNT GCTTGCCTCT 300  
 CAGGACATAG GCAGGTCAGG NNTGANCNGG GAAGGTCCAC CACACCATC GTCGAGTGA 360  
 TGATATTGNC NTGGGTNCTN GGNNTATGTG TTAANTAGGA AATGTNATAA ANCN 414

SEQ ID NO:5475

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06514

SEQUENCE DESCRIPTION:

GATCAACAAT NAGCATCAAA TCTATGGCTC CTGGCTCCAG CANCAAGACG CAAGAAGACA 60  
 GGANGAGAAG CANGAAGTGA GACTGGAGGG AAAGGGAGCT GAGTCTNCTA GN 112

SEQ ID NO:5476

SEQUENCE LENGTH:52

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06515

SEQUENCE DESCRIPTION:

GATCATTCTT TTATAGAGCA TATTTGCCAA TAAAGCTTTT GGAAGCCGGA AA 52

SEQ ID NO:5477

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06516

SEQUENCE DESCRIPTION:

GATCTAACTT TGCACTCTTT GATAATAATG TTTTAGATAA TGTGCGTAAT CCAAATTGGT 60  
 ATTGTAGCCT CTGTTAACAC AGACAGTATA TGTTTTAAAC TTTGATGTAA ACCTTTTNAG 120  
 ACCCAAACCT GTGGAAATAT CATGTGTAA GTNCTCTGTC TCTGTTTCTT TGTTCATTTA 180  
 TTACTAAAAAT GAACTTGTTA TTAAAGTATA TGCAAATNTG AAA 223

SEQ ID NO:5478

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06517

SEQUENCE DESCRIPTION:

5 GATCCGGGGN AGCTGTATCC CCAGTAGAAA AAACATTTTA ATCACTCTAA TATAACTCTG 60  
 GATGAAACAC ACCTTTTTTT TTAATAAGAA AAGAGAATTA ACTNCTTCAG AAATAACTAA 120  
 TAAATGAAAA ACCTTTAAAG GAAA 144

SEQ ID NO:5479

10 SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06518

15 SEQUENCE DESCRIPTION:

GATCTTTTGA CGNNTATANA AATGTACTAA TGTNATAAGT TAATGCTGGN CATTTCAATT 60  
 ATATATATTT TTAAGAGGCT AGAGGCITTT AGCTTTTAA AACTCCATTA TATACAN 117

SEQ ID NO:5480

20 SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06519

25 SEQUENCE DESCRIPTION:

GATCTTTTCA TCTCATGCAG ATATTTCTAT TGTGGGCTTA TACATTTGNT CACCTATTGT 60  
 TGATGGNACT TGNACTTTC CATTTTGGCG CTATTACAAN TAGGCACTAT GAATGACTGA 120  
 TGNACCACTT ACTTGAGCTT TATGNCTTAT TNTCAAAGCN GCAAAATN 168

30 SEQ ID NO:5481

SEQUENCE LENGTH:395

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS06520

SEQUENCE DESCRIPTION:

40 GATCAGTTAT GAAGAAGGGA AAGCTTTGGC AGAATCTTGG AATGCAGCTT TTTTGAATC 60  
 TNCTGCTAAA GAAAATCAGA CTGCTGTGGA TGTTCGTA AGGATAATT NNGAGGCAGA 120  
 AAAAATGGAC GGGGCAGCTT CACAAGGCAA GTCTTCATGC TCGGTGATGT GATTCTNCTG 180  
 CAAANCCTGA GGACACTGGG AATATATTCT ACCTGAAGAA GCAAGCTGCC CGTCCTCCTT 240  
 GAGGATAACC TATGCTNCTT TTTNCTCCTG TTAACCTGNA AGATATCATT GGGNTCAGAG 300  
 CTCCTNCCT TCAGATTATG TTACCTCTGA GTCTGTCCAA TGAGTCACTT CCATTTCAAA 360  
 TTNNNNGCAT CNNTTTCAN TGTGTATGTA GNATN 395

45 SEQ ID NO:5482

SEQUENCE LENGTH:89

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50 CLONE:HUMGS06521

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## SEQUENCE DESCRIPTION:

GATCTTCCAG AGAAGGGAAC ATCTGTCACA GACAATGACT GTATCTGTNT AGATATTTCT 60  
TATTTAATAA AGACGATTG TCAGTTAAA 89

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SEQ ID NO:5483

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS06522

## SEQUENCE DESCRIPTION:

GATCAGAAAT GCCTCCTTA CCTACCAGAG CCTACAACAC TACCTGCCAC TAATAGTTAT 60  
GTCACCTCT TATTAATCAT CATCTAGCCC TAAGTCTGGN CTATNAGTGA CTACAAAAGA 120  
TTAGCTGAGT GAATAAA 137

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SEQ ID NO:5484

SEQUENCE LENGTH:250

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS06523

## SEQUENCE DESCRIPTION:

GATCAGGGGA AGAATACCAA CCTGCATAAG TGTACTAANT CTACGTCTGG TTAATGTATG 60  
TACTCTCCTG GACTGAATGC AGTGATAAT TCCTGTCTAC ANTAGAAGTG TGCCCCAGTT 120  
CCACATTGA TTACACATGT GAGATTGCT GCTGTTGCAT ATAACACTAG GNTAATAGNT 180  
TTGNATNCAT GCAGTCATAA AAATTGGAAT GAGAATTAAN CTGCAGGAAC ATTTGNACGN 240  
TNTCTNCNCN 250

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SEQ ID NO:5485

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS06524

## SEQUENCE DESCRIPTION:

GATCAGAACC AGAAAGAACT NTGCTTNACC GAGAAAATAT CTAACATCG AAAAAGTTAA 60  
ATATTATGGA AAAAAACAT TGCAAAATAT AAAGTAANTA AAAAAAGGAA GGANCNN 117

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SEQ ID NO:5486

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS06525

## SEQUENCE DESCRIPTION:

GATCTAATGC AGGATGTCAG ACTTNTNTCT ATCCAGGAAT AAAACCAGTT ATGCCAGAAG 60  
TAACTATTAT NCACCTNTCT CCTACTGAAT TAAAATACTA TCAGTTGTAT ATNAAATN 118

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SEQ ID NO:5487

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SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06526

SEQUENCE DESCRIPTION:

GATCACAGTT TTCAGCANNT CAGACATGGT CTTGNGTAGT TGTTC AACAG TGTTTGCCAG 60

CTACAGAGGA AANGNCAGAC TCACAGAAAG GTGTCATTTA GAAGAAAGAA CACTAATN 118

SEQ ID NO:5488

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06527

SEQUENCE DESCRIPTION:

GATCCTCAAC GAAATCAATC TCACAATAGG NAAGGAAAAG NCAATACAAG GAAGAAACCA 60

TTGAGAAGAT GCAGAATAAA GTAATCTTAT ATACANGCTT TGATTAAAC TTGAAACAAA 120

SEQ ID NO:5489

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid.

TOPOLOGY:linear

CLONE:HUMGS06528

SEQUENCE DESCRIPTION:

GATCGCCATC ANTGGGCTAG TGACAGNGTA TTAATTTGCT TATACANTTN CTTTACTNTC 60

CTTTTTCCT TTCTGGAGCA TCACATGCTG GTGCTGTGTC TTTATAATGT N 111

SEQ ID NO:5490

SEQUENCE LENGTH:422

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06529

SEQUENCE DESCRIPTION:

GATCCTACAG ATACAAGTTG CTAANGGGC ATATCAACAG TCCAACAAAT AAAGAAGATG 60

CCTGGATTGA GCATGATGTT TGGAGATGGA GATTATGTG TCTCTGGGAT TGTGGGTTGG 120

ANTACTGGTC TGTGGCTGTN ACANCTATTC CTCTGTGAGT GACTCTTGCA TGGAGAGATT 180

CATATATTCA GGCAGCTAGG ATTGTTTCCTT CTA CTGGGAC ATACACGATT GANTTTNCTG 240

AATANGGGTA GTTAANCATT GTATGTTACN CNCACITTTG TGCTTTTCCT CCATTGTGCC 300

NTATTAAACG TCITTCGCNT CTGNGAGAGT CTGAGTAGC TGGTGGAGCG CCAAATACAA 360

CTGGTTGTCC GTGTGTNCTT TCCCTTTGTC ANTGGTTTGC CACATCAGTT TGTGNTGTAT 420

GN 422

SEQ ID NO:5491

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06530

SEQUENCE DESCRIPTION:

5 GATCCCCAG ATACCAGCTC TTCTGGNTAT ACACAGACCA GCTATAATTN GCTAAGCATA 60  
 AANTATTNCA GTGTATTAGC CAGCNGTGGC TCCAGAGTCT GTGCCCTTGA CCACCGTGCC 120  
 CAACTGTTTC ACATGCTGTG TTTGGTAGTT TNNCCTAGTG CTCTCCTTAA TAATGGTGGT 180  
 GTNTAGCAAA NN 192

SEQ ID NO:5492

10 SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06531

15 SEQUENCE DESCRIPTION:

GATCATTAGG TCAGAGTTTA CAGCNCCTCT CGTCACTAGA ATCCACCCAG CCCACGAATC 60  
 ATACCCNCT TGAAGGACAT TATTACTACT GNAANTTNGA ACAAACN 108

SEQ ID NO:5493

20 SEQUENCE LENGTH:329

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06532

25 SEQUENCE DESCRIPTION:

GATCCATCCA GAACAGCGGT ATCTGAAGCC CAGGCCATAC TCCCTGCCTC CTTNCTTCTG 60  
 CCTACCAGAG GCTCCANAGT TGAGCTTGTC CNNTATCTAG AAACATGTGA AGATGCCCAA 120  
 GAGCCTGGAG GCACTGCTGT CCTTCCTNCA GAAACAGTTT CTCCTCCTNC CCTCAGCCTT 180  
 GTGGCCANTT CCNCTTCACA TGAAGCCCTT TGGCATTNC TNGGGAAGGG ACTNGCCTGG 240  
 30 TACTTGCTGT TAGGGCAGGA AGGGGCAAAN GGNNGACTTT GGGTAAGTAA TCTGGGGGGT 300  
 TTAGATGGGN AGCANTAAGC CAGCTNGGN 329

SEQ ID NO:5494

35 SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06533

SEQUENCE DESCRIPTION:

40 GATCATGCTT GTNTNAGGCA ATCATGGTGG CATCACCCAT AAAGGGAACA CATTTAACTT 60  
 TTTTNTCTCA TATTTTAAAT TACTACANGA TTATTAAAGA TAAATNATT TGA AAAACTC 120  
 TTAAA 125

SEQ ID NO:5495

45 SEQUENCE LENGTH:337

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06536

50 SEQUENCE DESCRIPTION:

55

5 GATCATGAGA CTGAAATTGG TCAGAATTGT GTCCAGAATG TGCTCAGCTA ATTCAGTATT 60  
 CTTCGCCATT CTGGGTTGGA GTTACTGCA GAGTAATTCT TACAGTGCTG ATGTCAAGAC 120  
 TGTTACTGTT CTTGACTTTT GATTCCTTGC TCATGACATG AGTAGGGTGT GCTCTTCTGT 180  
 CACTTCACAC AGACCTTTTG CCTTTTTTAG CTGCAAGTCA AGGACTAGGT TGATGATGCN 240  
 CATGACCTGT AATTGTAAAG ANGCTTGGNC ATCTGCAAAT GATATTNAGA CCATCTNGGC 300  
 TTGTGCTTNN ATTCAAATA ATGTGAACCA ATANGTN 337

10 SEQ ID NO:5496  
 SEQUENCE LENGTH:194  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06537  
 15 SEQUENCE DESCRIPTION:  
 GATCCATGAT GATAATTAAG AGAAGAGAAA AAAAGATATT ATTTTGTNA GGACAAACCA 60  
 TTGTAGGTTT TTAGCAATGT GTATCTGTGT GTCCCTCACA CCTTTTCCTA TTCTACTTTT 120  
 TTTTCCTTTT TTTAAAAATA TTATGTACTA TATTTTNAGT CTCAAACACA CTATATATTA 180  
 TATATNTNNN NNNN 194

20 SEQ ID NO:5497  
 SEQUENCE LENGTH:207  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS06538  
 SEQUENCE DESCRIPTION:  
 GATCATTTCT AGGCAAAATT GTGAAGCTAA TGACCAACCT GTTCTACCT ATATGCAGTC 60  
 TCTTTATTN ACTAGAAATG GGAATCATGG CCTCTTGAAG AGAAAAAGT NACCATTCTG 120  
 30 CATTTAGCTG TTTTCATATA TTGCATNTCT GTATTTTTTG TTTGGATTGT AAAAAGTTCA 180  
 CATAATAAAC GATGGTTGTG ATGTAAA 207

35 SEQ ID NO:5498  
 SEQUENCE LENGTH:320  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06539  
 40 SEQUENCE DESCRIPTION:  
 GATCCAAGTG ACCAAAGGAG TTCAAGGCC AAAATTAGT TATGCTGGAT TAATTCTGAG 60  
 AGTAACAAGC ACATAGATTA TAATCTAAGA AAACCCTTTG TAGCTATGCA TNGTCGGGAG 120  
 AGCATCTAAC ACTAATGGTG ATGTTTCCCA TGCAGAGACT CAGATTACAG TGACTCTTCC 180  
 AGTGAAGACA GATGAAAGCC ATTGGGCATT GTNCCTTTNT TAATCCAAGC TAAACTANCC 240  
 45 AAGGATATAG GGGTGTGTAT GTGTCTGNGT GTGTGTGTTT GTNTGTGTGT GCACATACAT 300  
 NTNTAGGTAT GGTGTTTGGN 320

50 SEQ ID NO:5499  
 SEQUENCE LENGTH:115  
 SEQUENCE TYPE:nucleic acid

55



TOPOLOGY:linear

CLONE:HUMGS06540

SEQUENCE DESCRIPTION:

5 GATCTGTCTT GGTCGTTTGT GTTATAAAAC CAAAGTTCTC TACAGACTTT ATTTTGTAC 60  
AATATCATTT TGTAACTTTT TACAAATAAA AACTCATTTT TATTGCTCTC TGA AAA 115

SEQ ID NO:5500

SEQUENCE LENGTH:314

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06541

SEQUENCE DESCRIPTION:

15 GATCACTTAC GGAGAAACAG GAGGAAATAG CCCTGTCCAG GAGTTCAGTG TGCCTGGGTG 60  
CAAGTCTACA GCTACCATCA GCGGCCTTAA ACCTGGAGTT GATTATACCA NNACTGTGTA 120  
TGCTGTCACT GGCCGTGGAG ACAGCCCCGN AAGCAGCAAG CCAATTTCCA TTAATTACCG 180  
AACAGAAATT GACAAACCAT CCCAGATGCA AGTGACCGNT GTTCAGGGNA GCAGCATTAG 240  
TGTCAGTGG CTGCCTTCAA GTTCCCCTGT TACTGGTTAC AGNGTANCCN NCGCTCCCN 300  
20 AANTGGGCCA GGAN 314

SEQ ID NO:5501

SEQUENCE LENGTH:312

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06542

SEQUENCE DESCRIPTION:

30 GATCTGGGTT TAGAGTGTGT ATGATTAATA AATATACCTT TCCTCTTTTC AGGGAAAATA 60  
ACAACCACCC NTA CTGATAG TTGGGAAAAG AAGATTGGGT TATTTNCCA TATCATTTAG 120  
CTGGAAGTGA CATTTAAAAG CACCCTGCAT CACTAGTAAT AGTGTATTN NCTATTCTGC 180  
CCTTGTAAAT GGTGTCCCTG TAAAACANTC CCCACAGATT ACTTTCAGAA ATAGATGTAT 240  
TTCTCTNCGT AAGGGCCAGG TTTATTTCTT CCTTTTTTGN GATNNNNGGN GGAAANTGCT 300  
35 GCTTGCACAT TN 312

SEQ ID NO:5502

SEQUENCE LENGTH:217

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06544

SEQUENCE DESCRIPTION:

45 GATCATCCTG TAAACATTTT ATCATGTATT AATCATCCCT GCCTGTGTCT ATTATTATAT 60  
TCANATCTCT ACGCTGGAAA CTTTCTGCCT CAATGTTTAC TGTGCCITTN NTTNGCTAG 120  
TATGTGTTGT TGA AAAAAA AACATTCTCT GCCTGNGTTT TAATTTTGGT CCAANGTTAT 180  
TTNAATCTNG TACAATTAA AGCTTTTGCC TATCAAA 217

SEQ ID NO:5503

50 SEQUENCE LENGTH:334

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06545

5 SEQUENCE DESCRIPTION:

GATCAGGTTG AATGAATGGA ACTCTTCCTG TCTGGCCTCC AAAGCAGCCT AGAAGCTGAG 60  
GGGCTGTNTT TGAGGGGACC TCCACCCTGG GGAAGTCCGA GGGGCTGGGC NAAGGGTTTC 120  
TGACGCCAG CCTGGAGCAG GGGGGCCCTG GCCACCCCTT GTTGCTCACA CATTGTCTGG 180  
CAGCCTGTGT CCACANTATT CGTCAGTCCT CGACAGGAG CCTGGGCTCC GTCCTGCTTT 240  
10 AGGGAGGCTC TGGNAGGAGG TCCTCTCCCN NATCCCTCCA TCTTGGGGCT CCNCCAACCT 300  
NTGCACAGCT CTGCGGGNGC TGAGATATNA ATTN 334

SEQ ID NO:5504

15 SEQUENCE LENGTH:87

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06546

20 SEQUENCE DESCRIPTION:

GATCTTTTAA AGGTTTTNAC CATTITGTNA TGAGGAATTA TACATGTATC ACATTCACTA 60  
TATTAAAAAT GCACTTTTAT TTTNAAA 87

SEQ ID NO:5505

25 SEQUENCE LENGTH:323

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06547

30 SEQUENCE DESCRIPTION:

GATCCATCCC ATGATTTGTN CCTGTCTGAG GCATAGAGGC AGGCAAGCCG TGGATTTTNC 60  
ACATGGTGAC TTTCCCACTG TGCCATGATA CAGTGTGCAT CTTATAGCAG TGCCTTTNTG 120  
TCAGGGTCTC TGCTGGCAGT CTAGACCTTT TGGGCAGAAA GGAGCTTCAA ATGGCTGTGA 180  
TAAGGAATAT TAAAAATNGT GTTTCTACTT TAATTGTATT GGCTGTTTAT GTATGTAGGA 240  
35 GTTAAAAATAG GCCAAACTGG AGAAATAAGC GCATTCTGTC CACCANAAAN GTGGNTTGGN 300  
TGGTNNNTGT NNGNTTNGGN GGN 323

SEQ ID NO:5506

40 SEQUENCE LENGTH:90

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06548

45 SEQUENCE DESCRIPTION:

GATCAAGTTG CCATGAAAAA CCATCTACTA TATGTNAGAC ATGACATTCT NTTTCTCTCC 60  
TTCTGAAAA ATAAAGTGTG GGAAGAGAAA 90

SEQ ID NO:5507

50 SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS06549

SEQUENCE DESCRIPTION:

5 GATCTTACTT TCTTGCTGCT TTTCCTCACTA TAATCATTTT GCTCTTGCTT TAACAAAAGN 60  
 NGNGGCACAG NAATTTAGTA AATTGTGTGTA ATAACATTTA AA 102

SEQ ID NO:5508

SEQUENCE LENGTH:64

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06550

SEQUENCE DESCRIPTION:

15 GATCTCACCA CTGCACTATA GCCTGGGCGA CAGAGCAAGA CTCCCGCTCC AAAAAANGGA 60  
 GAAA 64

SEQ ID NO:5509

SEQUENCE LENGTH:360

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06551

SEQUENCE DESCRIPTION:

25 GATCCACAAA TCGCTAGGAA TGTGTATACT CTGGGTAGTA AGTTTGTAAGT ATTAGAAGGT 60  
 TTAATGACAA GTATTGAAG AGCTGAAAGT AAGTGTGGG AGGCCATCCC TTATGAAGGA 120  
 CAATGAATGG CAAGTAAAAG ACCAAGTTCT GTTCCTGGGT CCATTAAATT AGTAAAAANG 180  
 GCAAAGTTCT TTCAGCACAC ATATCTGCAT GCAGTCACGT GCTGCCTAAG GNTGCTTCAT 240  
 TCAACANTGA GCCTCACAGC CGTGCTACAC ANTAGGATAN TACTGTATTT TTNCTGTACC 300  
 30 TTTAACATT GTGTTACAAT GGCCTACAAG AGGCTTGTGT GGNTGGCTTT NNNTGTGGGN 360

SEQ ID NO:5510

SEQUENCE LENGTH:357

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06552

SEQUENCE DESCRIPTION:

40 GATCATCCTC ATTAGCACAC AGATTTTNA AATCAATTC TCTNGCCATG CCTCCTATGT 60  
 GTTCACATCT CTGCATACAC TACAGATATA AGTGATAAT CATTATATA NACATCTGGT 120  
 AGGTATTCTG TAAAACTGTG TTTACTTTAG TGCATGTNAT TGCATGTNA TGATGTGACT 180  
 GGGGTGTTTC TTTGTGCATG AAACTTTGCT TCTNCACAGA NTTAGATTAC TGCTCTCTCT 240  
 ATATNGANCT NCATATACAG CGTTTTCTTG TTATCAGCCC CCCNAAGTCT GGGATGCCCG 300  
 45 GTGGTTGGTG NTGACATGTG AGTGGTGNCC TGGGNGGTCT GNTNCACATA GGGGCNN 357

SEQ ID NO:5511

SEQUENCE LENGTH:138

50 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55

CLONE:HUMGS06553

SEQUENCE DESCRIPTION:

GATCITTTCA GCTGCTATTT TGAATAATG ACTATCATAT ATCATAACAG TGACTGATGT 60  
 TGGTTGTAAT GGTGGGTTT AGGATGAACC ATTTAAGGA TGCCAAATNA AATATTAGTA 120  
 TTTGTACACA GTAAGAAA 138

SEQ ID NO:5512

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06555

SEQUENCE DESCRIPTION:

GATCCCAGCA GGGNTTCTGC TCTGGGGCTG GCAGGTTGCC TGGTATTATG CCCAAGGNCG 60  
 NTCTGCCTGG GGGAAAGGC AGCCAGGCAG AGGCCAGTG TCTAGTAGGC NGCTGAATTT 120  
 CCTGGAAGGG GTGATTGGT GGAAGNGGN CAGNAACCC AGCCTNN 167

SEQ ID NO:5513

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06556

SEQUENCE DESCRIPTION:

GATCCCTTGG AGCACCTTNA TGCCTGGGGT TTCTCTCCCT AAAGCTTCTT GCAGTCTAAG 60  
 CCTTATCCCT TATGTNCCCC ATTAAAGGAA TTCAAAGA CATGGAGAAA NTGGGAAGG 120  
 TTTGTNCTGA CTGCTGGNNG CAGATAGCC GTGGNAGGN 159

SEQ ID NO:5514

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06557

SEQUENCE DESCRIPTION:

GATCTGGACA AATGGCAAAT AATTTGGGGT TGAATTATGG CCCAGAGAAG TAAGCAAATG 60  
 NAAACTAAA CANTTATAA TGTATCTGGG AAGCAAAGGT ATTCATANTA NGTCCCATGG 120  
 CCAGCTGCGA GCAGTATTTA ACTAGACATG CTGTTGTCAA TANNNNN 167

SEQ ID NO:5515

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06558

SEQUENCE DESCRIPTION:

GATCGTCCCC CTTTNTGGG TGGAAAAGCA GGTGAGGNTG GGGTGGGCTG AGGCCATTNC 60  
 CGCCACTATC TGTTAATAA AATCCGTGAG CACGAAA 97

SEQ ID NO:5516

SEQUENCE LENGTH:225

SEQUENCE TYPE:nucleic acid

5 TOPOLOGY:linear

CLONE:HUMGS06559

SEQUENCE DESCRIPTION:

10 GATCCTCCGG AAGTAGTCTC TNCCTCGGC AGCGGAAATA CTGATTCCCA CTGCTCCTNC 60  
 CTCTAGGGTG CAGTGTCCGT ACCTNCTGGA GCTGGNCCCT CCTTCCCAN CCCAGACATT 120  
 GAGAACTTG GGAAGAAGAG AGAAACCTNA AGCTCCCAA CAGCACGTTG CGGGAAGAG 180  
 GAAGGAGAG TNTGAGTNTG TGTGTGNTT TTTCTATTG ANCAN 225

SEQ ID NO:5517

15 SEQUENCE LENGTH:340

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06560

SEQUENCE DESCRIPTION:

20 GATCATTAAAT AAAGCTTTTC TTGGTTCCTT CAGTGGTGT GGTAGTAAAA TGGAAGGNGT 60  
 CTTGTGCAG GTAACATAATG AAGANGTGGT CAACCACAGA GTCTTCAAGA AATAAGAAAT 120  
 TCTGTACCAN CTGAAAGTAG TGCTTGTGG TGCTTCNTT TAAAAAGCAC TCTTTTAAAT 180  
 AAAAGGGAAT TGTCTTCTGA TAAACCAAAC ATTTAGTTGA GGTCTTGAT ATAAACATT 240  
 25 TACAANNTGA GTGTTGTNTG TAAAGCAGTA GCCNTCATT TTGGCTAGNG AGNTAAATGN 300  
 GTCANGTTTT ANCTAGGTTT TNGTGAGTNG NCAGGTTTNN 340

SEQ ID NO:5518

30 SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06561

SEQUENCE DESCRIPTION:

35 GATCAAAGCC AGTNTTAAAT GGGAGACCGA GCGAGCGCGG CAAGTGCTGG AACACCTGCT 60  
 GAAGGAAGGG TTGGCGTGGC TGGACTTACA GGCCCCAGGG GAGGCCACT ACTGGCTGCC 120  
 AGCTCTCTTC ACTGACCTCT ACTCCCAGGA GATTACAGCT GAGGAGGCCA GAGAAGCCCT 180  
 CCCCTGACTG CATGTGGAAG GGCACACAGC AGCAGGCAGG GAGGAGGCCG AGGTGGCAAA 240  
 TAAACCTGGG CAATTTTGT TATACAAAA ATAGAAGAAA AGTTCCAAGT TTTCTTTCT 300  
 40 TCCCTCATT TTTNTTTT GAAAAAAGAN 330

SEQ ID NO:5519

45 SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06563

SEQUENCE DESCRIPTION:

50 GATCTCATGA TGATTCANAC CACAGNCTGG GNTAAAGATG TCTTGACCTC TGAGGCTAGC 80  
 ATAACATATA TNAGAATACA NCTTGCTAT TTCCAGAAAA TCTGTATATT N 111

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SEQ ID NO:5520

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06564

SEQUENCE DESCRIPTION:

GATCAGCTTA CTGAAAAGAA GCCTCCNNAG TATTCCAAAT ACAGATTACA TCCAGCTGCT 60  
TAGTGAAATT GCCAAGGNAC AAGGNTTTAA TATAACATAT TTGGATATAG NTGAACTGAG 120  
CGNCAATGGN 130

SEQ ID NO:5521

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06565

SEQUENCE DESCRIPTION:

GATCNACAA NTGAATATGT GTTACTTAAT AAGGCTAGGC TGGCCATCAG TNGCTTANTT 60  
CAGATGTGTC ACTAAATTTC CCNTCTAGAT GGTCTTGAG CAAAACITAA TAN 113

SEQ ID NO:5522

SEQUENCE LENGTH:271

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06566

SEQUENCE DESCRIPTION:

GATCATCACA GTTTGAGTTT GACCCCAATG CCAGGATGGT GACACACATA TTAAAGAGTA 60  
ACAGCTGGTT ACATTGCTAG GCGAGATAGG GGGAGACAG ATATGGGTGT TTTAATAAAA 120  
TCTAATAATN ATNCATCTAA TGTATTATGA GCCAAAATGG NTAATTTTTC CTGCATGTTC 180  
TGTGNNMTGN GAAGATGAGC CTTGCAGATA TCTGCATGTG TCATGNNGAA TGNTTCTGGA 240  
ATNCTTNACT TGCTNTTGGG NTTGCACTGG N 271

SEQ ID NO:5523

SEQUENCE LENGTH:126

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06567

SEQUENCE DESCRIPTION:

GATCTCACTT TCCCCTTGTG GGGTAGGAAC CGATGCCAGT GGGAGGGATG TGCCCTTGAC 60  
CATTACGAC TGTTTTTTTT TTTTTTTTAA AAAAAATGNN GTTNTTGGNN GGGGNAATNC 120  
ACANAN 126

SEQ ID NO:5524

SEQUENCE LENGTH:156

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06569

SEQUENCE DESCRIPTION:

5 GATCACGGGA ATGCTGCTGG AGATAGACAA CTCTNAGTTG CTGCACATNT TAGAGTCCCC 60  
CGAGTCTCTC CGCTCCAAGG TGGATGAAGC TGTAGCAGTT CTACAGGCTC NTCATGCCAA 120  
GAAAGAAGCT GCCCAGAAGG TGGGCGCTGT TNNNNN 156

SEQ ID NO:5525

10 SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06571

15 SEQUENCE DESCRIPTION:

GATCCTTCTA GACCAAGGAC CCATTGTTAA AAGCATGGAT TCTGCCTGAN TTACTTCCCT 60  
TTTGAGAAAT CATATCTCAA ATACATAACC TGGTAATATA ACTGAAAAAA TAAAAGTGAT 120  
TGCTCCTTCC AAA 133

20 SEQ ID NO:5526

SEQUENCE LENGTH:156

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS06572

SEQUENCE DESCRIPTION:

30 GATCCCTGCT TCATAGATTT GCATCATTCA AGCATATCTT GTAAAAACAAA CACATATTAT 60  
GGGACTAGGA AATATTTATC TTTCCAAATT TGCCATAACA GATTAGGTT GCTTNCCTTN 120  
CTTTGAAGGA AAGTTTAATT ACATTGCTCT NNNNNN 156

SEQ ID NO:5527

SEQUENCE LENGTH:63

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS06573

SEQUENCE DESCRIPTION:

40 GATCCTAGCT GCAGATTGCA TCCCACAATG CGAGAATAAT AAAATAAAAT TNGATATTNG 60  
AAA 63

SEQ ID NO:5528

SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

45 CLONE:HUMGS06574

SEQUENCE DESCRIPTION:

50 GATCNATGGT GTGACTCAAG CTCNCCTTA CCCAGGGGGG GTAAGGGCAG GCCTCTAGCT 60  
ACTTGGAGTT GTCTGTAATA ATCTNGAAAG GCCCAAGGGC CTGTGCCCAT CCTGACTNAA 120  
AGGNATCTCC TTCCCTGTTT CATATCACAT GACAGAGAAA CCTGTTCTCA TGGCATGNAA 180

55

CATCCCTGTN AAGAGAGCGT TGCNNN

207

SEQ ID NO:5529

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06576

SEQUENCE DESCRIPTION:

GATCTTGCAC ATGAAGCTAC AAAACTGGTA AGAAACAAAT GGCACATGTG NTGGGAATGG 60  
 AAGTCAACCT TTTTGAATTT TTCAAATGTA AGTCAGTCTG GAAAATCCCA GTAAATTGGT 120  
 ATATTGTGTT TGGGTTATTT TTGAAGACCT CTTTAAAAAT TTGCCTAAAA TAAATNCTCG 180  
 GTATGCTAAA 190

SEQ ID NO:5530

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06577

SEQUENCE DESCRIPTION:

GATCGCCGC CAGAAAGGTT ATGCATCATG TGCCACAGCC TCCAAGGTGC CCATCATGGA 60  
 ATNTCGTGGG GGCTGTGGGC CNANTGCTGC CAGCCCACCC GCAGCAAGCG NCGGAAATAC 120  
 GTCTTCCAGT GCACGGNTGG CTCCTCGTTT GTAGAAGAGG TGGAGAGACA CTTAGAGTGC 180  
 GGCTGCCTCG CGTGTTCCTA AGCCCCTGCC CGCCTGCNTG CCACCTCTNG GACTCCAGCT 240  
 TGATGGAGTT GGGACAGCCA TGTGGGACCC CCTGGTGATT CAGCATGAAG GANATGAAGC 300  
 TGGAGANGAA GGTAAGGAG GAAGAGANTA TTANGTATTT N 341

SEQ ID NO:5531

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06578

SEQUENCE DESCRIPTION:

GATCTNTTCC AACAGTTCTN TGTAACCAA ATGCTATTTT TCANTGCATT TGGACTGCTG 60  
 ACCATTAAAA AGCAGCCTAT GATTGCTTCT TTTTGTAAG CAAGCAACCN GCCTCCACTT 120  
 TAGCTGTTTT NACTATTNGA TN TN 144

SEQ ID NO:5532

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06579

SEQUENCE DESCRIPTION:

GATCCTAAAA CGAAGAGAAT TTGACTCTC CAGAAAGCTA ATAGCTGGTT CAACTGCAGG 60  
 AAAAATTGAA CATTACTAAT TTGAATGGAA AACACATGGT GTGAGTCCAA NGGAGGTGTT 120  
 TTCTGGAAGA NCTGTCTATT TCCTCAGTCA TTTTAACT CTAGAGTCAC TGATACACAG 180



AATATAATCT TATTTATACC TCAAAANGAN TNANANGGGG NNNN

224

SEQ ID NO:5533

SEQUENCE LENGTH:345

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06580

SEQUENCE DESCRIPTION:

GATCTNCCTC NACACCTNGG GCAAAGTCTA TGGGAAGATG GTTCTTAGC TCTCCATTG 60  
 CCATGATTTT CCTCCCATTC ATCATGAGGG AGTTTCTCAA ACCAGGAGTT NATATTTATT 120  
 TNTNAGAAAA TACACACTTT TCAGGAGAAA CCTGAGCATG ATTTTGGATT CTCCACCTCC 180  
 CCCCAGTCTC GGNNTCTGGG ATTCAGCTCA AGGNTTCAGT GTCTTCATTT TTACAAAAGT 240  
 TCCCCAAGA AATCAGCAAC CAGCCTCTGT TTCATCTGGG AGCCCCTCCC TNGGNCCCT 300  
 GGGTTTGGG GGGTGCTGNC CTACTGGGG AACAGCGGG GGTGN 345

SEQ ID NO:5534

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06581

SEQUENCE DESCRIPTION:

GATCATNTTG GAACCAGACA AGAATCCAAA GAAAATAAGA ACACAGACCA CCAGTGCAAA 60  
 ACAAGAAAA GCACCAAGTA AAAAGCCAGT GAAAAGAAGA AAAAGAAGA GAGCTGCCAN 120  
 TTAAAGCTAA CAGTTGTATA TCTGTATATA TAACTATTAA AAGGGATATT TATTCCAA 179

SEQ ID NO:5535

SEQUENCE LENGTH:287

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06582

SEQUENCE DESCRIPTION:

GATCAAAAGTT AAGNTTATAT CCTGTTTGTG GTATCAGATA TTTCTCTGTG TACAATTATA 60  
 GGATTGTAAT CTACACTGGA ATTTNAGGC AGTAAGTCAC CACAAAATGT TTTAGATAAG 120  
 ACACAATAAA ATTATTATAA ATAAAAGCTT AATGTTTGTG AAAANTCTCT TTTTAGTAT 180  
 TTCTTTTTTC ACATGNAAGN NGTGGTGGCT GCTAAANAAA MAGCTACAGT GTTTATTANG 240  
 GGTGTTTTTG ATTTNTGTNA NTCTTTGTAA ATTGGTCAGT GCCTGTN 287

SEQ ID NO:5536

SEQUENCE LENGTH:258

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06583

SEQUENCE DESCRIPTION:

GATCCCAGAG GCTCTCCTCA CCTCANCTGA GCTCCTTTAA AAGTAATTCA AGGGACTATG 60  
 TCACTCAGCC TCATTNCTG GACCAATCT GGAGGGAGAA CCCCTAAAAC CCCTAAGTAA 120

GGTTGCCCAG GGGGTTGTCC CCAGGTGGGG GGAAGCAGGG GAGAGAAAAT GGTAGCCATT 180  
TTAACATTGT TTTGTATAGT ATTTATTGAT TCAGGAAACA AACACAAAAT TCTGAATAAA 240  
ATGACTTGGA AACTGAAA 258

5

SEQ ID NO:5537

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS06584

SEQUENCE DESCRIPTION:

15

GATCGCTTGA GGCCAGTTCA AGACCAGCCT GGCCAACATG GCGAAACCCG TCTCCACTAA 60  
AAATACAAAA CTTAGCCAGG CGTGGTGGCG CGCGCCTGTA ATCCCAGCTA NTCGGGAGGC 120  
TGAGGCAGGN GAATCGCTTG AACCCGGGAG GTGGAGGTTA CAGTGAGCCA AGATTGCACC 180  
ACTGCACTCC GGCCTGGGCA NCATNGCGAG ACTCTGTCTC AGNNAGGAGG GGGGGGTNN 240  
NNTANTNN 248

20

SEQ ID NO:5538

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06585

25

SEQUENCE DESCRIPTION:

30

GATCCTGAAA GAGGACAAAC TACATTGCCT TTTAGACCTN TGACTCAAGA AGAAGATGAT 60  
GACCAAAGGT GATTGTAAAC TTAACATGCC TTNTCCTGAT NTTGAAGGAT TTGTGAAGGG 120  
AAAAAAATTC TNGGCTCTTT GTATATAATA AAATGAGACT ANANGCATTG TNNAAAAAA 180  
AAAAGATTAA NTTTAGAN 198

SEQ ID NO:5539

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

35

TOPOLOGY:linear

CLONE:HUMGS06586

SEQUENCE DESCRIPTION:

40

GATCCCCACA CTTACTCTAC CCTCTNGGCA AATTGGCATT CCGGTGGTGG GTTTGTNTC 60  
CTTTAACACA TTAATAAAT NAGTATATAG GATGTGAGGG GAGGGGTGAG ANCAACTAGC 120  
TGTAGCATGT NTAGGCTATA TACTTTACCA NTTGACTTCT TTCCTGTTTT TTTTNAAAA 180  
NAAAAAAN 188

SEQ ID NO:5540

45

SEQUENCE LENGTH:138

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06587

SEQUENCE DESCRIPTION:

50

GATCTGGGTG TGCTCTATGG GGAGTNTGTA CGTCAAANAG CAAATGTCTA TAAGGGGCC 60

55

TTTTAAATN AACATTTTCC TCATTGAGCA AGCNTGGATT CTCTAATGTA GAAATCAAGC 120  
CATCTTNATA ATTNCACN 138

5 SEQ ID NO:5541  
SEQUENCE LENGTH:332  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS06588

## SEQUENCE DESCRIPTION:

GATCCTCCCA CCTCAGCCTG CTGAGTAGCT GGGTCTACAG GTGCACACCA CCATGCCTGG 60  
CTAAAGGCAT GTCTGCATTT ATGCGAGGTG TGTGACCGG GTGGGGAGGG AGCTAGGACT 120  
GAGATTCCGC TGTNTAAAT GCACAAAAG GGTTCGCTAA GCAAATTGAT ATTTGAACTA 180  
15 AAAGATGGAT TAGGGTGAGA GACTTAGTTT ANTCAGGAAT AGTNGCAGAG NCANCCACAN 240  
CAANAANTGN ATTCCTTGN GACAGCCGTT TGTACGTACA GCAGGGNNCT GGTTCACAGN 300  
TTTCACGGAG GGNGGNTAGG GTTCTTNTAC TN 332

20 SEQ ID NO:5542  
SEQUENCE LENGTH:106  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06590

## SEQUENCE DESCRIPTION:

25 GATCAAAATNA TTGACTATT GCTAGACATT TCTATACTCT GTTGTAACAC TGAGGTATCT 60  
CATTTGCCCA TGTAAATTT TTTCTAAATA AATTGACAAA AACAAA 106

30 SEQ ID NO:5543  
SEQUENCE LENGTH:268  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06592

## SEQUENCE DESCRIPTION:

35 GATCACAGCC TCCAGGGCCC CCCAAATCCC AGGGAAGGAC TTGGGAGAGA ATCATGCTGT 60  
TGCAINTAGA NCTTTCTGCT TTGCACAGGA AAGAGTCACA CAATTAATCA ACATGTATAT 120  
TTNCTCTATA CATAGAGCTC TATTTCTCTA CGGTTTATA NAGGCCTTGG GGNTCCAACC 180  
AGGCAGTAAG ANGTGCTTCT GAACCGCAAG GGGCGNACGA CTGGAAGTAA AATAGTTTGT 240  
40 TTTTCNCANT TCGNGGGNAG GGGNNGGN 268

45 SEQ ID NO:5544  
SEQUENCE LENGTH:177  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06593

## SEQUENCE DESCRIPTION:

50 GATCCAATTA ACAAATTCTG CACTGTGGCA ACTNAACGAN ATTATGCTTT GGACAGCTTT 60  
ATGTGTGAAT GTAAGAACAT ATTCTNAAGA AATGCTGTAA CTTTATCCCA TATANCTTCA 120

55

TANGAATTTC TCTATAGGCT TGGNATTTGC AATAAAAATA GAGGATATGT TGGCAAA 177

SEQ ID NO:5545

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06594

SEQUENCE DESCRIPTION:

GATCANACAG CCTACANCCA GCCCGAGTG TGCATCANGG TAAAAGAGCT GAGGGCTCTC 60  
TNCAGGGAGC AGCCCATTTA GGTCTCTGTN GTTGTGTGA GGGAN 105

SEQ ID NO:5546

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06595

SEQUENCE DESCRIPTION:

GATCATATNA GACGAGNAAG AGGAAGACCT AAAAGTGCAT CTGCCAAAAA ACATGAGGAA 60  
GAAAGTGAGA AACAGGAAAA GGAAATTNAC ATCTATGCTA ACCTGTCTGA TGAAGAAGNCT 120  
TTCGTGTTTT CAGTCGCCCTT NGCAGCNNN 149

SEQ ID NO:5547

SEQUENCE LENGTH:411

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06596

SEQUENCE DESCRIPTION:

GATCAGTGTG AGTCTGAAG CACTTTNAGN GCTGTGNAA CGACATCCAC TTTGGGTTTC 60  
ATTCTTTTGT AAGCAGAGGA GCTGTCAGTC ACTCGTGCTT GTCGGTGGCC TCTGAGCCAT 120  
GGTGTGAGT GAAGAGTAGT TCTTGTGTTT TACAACCTTT GTGAGTCAGC CATGCCCCGA 180  
AAGCGTGCTG TGTGTTAGTC CTGGTAGGAA TATTTATNAG AGTTCACACT ATGTAAAACC 240  
CAACNGCTTC ANCTATTGCC CTTTCAACAG TTTTGCCACT GACCGGATAG AACCGGTTTC 300  
AGTCTCTGGA TGGGTGTGTT TGGTGGGTTT GTAACCATG ACGGGTTTAA ANCCATGGGT 360  
TTNAAGATTT GGCCCAAATA ACCAGNAATT TTGTTCCGGG GAGGGGGTTN N 411

SEQ ID NO:5548

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06597

SEQUENCE DESCRIPTION:

GATCATAAAA GGCTATTATC TATNCTGGGG AACGATTATA ACTTAAATAA TTATTTTAAT 60  
AAAAATACTA AGCTNNAAA 79

SEQ ID NO:5549

SEQUENCE LENGTH:102  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06599  
 SEQUENCE DESCRIPTION:  
 GATCATCCTG CAAGTGCTCT NGTGCCTAGG ATTCACTTT CTTTCACCG TAGGCCCTGA 60  
 CTGGCATTNT ATTAGCAAAC TCATCACTAG TCGTNGTNCT NN 102

SEQ ID NO:5550  
 SEQUENCE LENGTH:166  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06600  
 SEQUENCE DESCRIPTION:  
 GATCAAAACG ACGAAGAAAN GNCNCANAGA CTCAAATAAG GACAGAGTGA TTTCCAATAA 60  
 TGTCAATAG ATTTAGGAGC AGAAATGCAA GGGGCTGCAT GACCTACCAG GACAGANCTT 120  
 TCCCAATTA CAGGGTGACT CACAGCCGCA TTGGTGACTC ACNNNN 166

SEQ ID NO:5551  
 SEQUENCE LENGTH:219  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06601  
 SEQUENCE DESCRIPTION:  
 GATCTCAGTT TCAAATCTCC CCAAGCTGCC TAAATTGAAA AAGCTTGAAC TCAGTGAAAA 60  
 TAGATTCTTT GGAGGTCTGG ACATGTAGC TGA AAAACTT CCAAATCTCN NACATCTAAN 120  
 CTTAAGTGA AATAANCTGA AAGATATCAG CACCTTGGA CTTTGAAAA AGTTAGANTG 180  
 TCTGANAAGC CTGGNCCTCT TTANNTGTGA GGTNCCAN 219

SEQ ID NO:5552  
 SEQUENCE LENGTH:104  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06602  
 SEQUENCE DESCRIPTION:  
 GATCTCTTNG CGACAGTACC AAGCACGGTT CTCTACACAG GTGACTNAAG TTGCCTCTGT 60  
 GTTGGCTGGC ATCCCTGAGT CCCCTNCGG CTCCTATGGA NCNN 104

SEQ ID NO:5553  
 SEQUENCE LENGTH:94  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06603  
 SEQUENCE DESCRIPTION:  
 GATCATCTGA GCCTCAGGAG GTTGAGGCTG NAGTGAGCTG TGA CTNCGCC ACTGNACTCC 60

AGTCTGGGAC AACAGAGCAA GACCCNGTCT TAAA

94

SEQ ID NO:5554

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06604

SEQUENCE DESCRIPTION:

GATCTCCAGC TGCACAGGCC ACCGNCCTAG GGCCTGGCCG CTGTTACAGA AACAATAAAC 60  
CCTGATGGGC ATGGCAAA 78

SEQ ID NO:5555

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06605

SEQUENCE DESCRIPTION:

GATCGTAACA ATGCCAAGAA GACACAAGAA TATGAGAAAG GAATTCCTAG AAAAAAGGCA 60  
AAGGTTTCAA TGAATAAGCT AATTTTCTCT AAGTCTACTG ATAACATACT CCTACCCCA 120  
TCCTCCATTA ATAAAAGANT GGTGTGTGTA TTGTATTATG AGGGAATTAA AAGTGTGATA 180  
NGANANNNNN N 191

SEQ ID NO:5556

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06606

SEQUENCE DESCRIPTION:

GATCGGAGAA TTGTGTAGGC GAATAGGAAA TATCATTCCG GCTTGATGTG GGGAGGGGTG 60  
TTTAAGGGGT TGGCTAGGGT ATAATTGTCT GGGTCGCCTA AA 102

SEQ ID NO:5557

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06607

SEQUENCE DESCRIPTION:

GATCTCACTT CTGTCAGATG CTCCCATCCA CTATNAATGC ACTAGGTGGG AGGAGAGGGC 60  
GGCAATGACA CTGCACCTCT CCTTTCCAC CGCATTCCCT GGAGCTCCCT AAATAAACT 120  
TTTTTTAACG TGAAG 135

SEQ ID NO:5558

SEQUENCE LENGTH:182

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06608

SEQUENCE DESCRIPTION:

5 GATCAAGTAA AAATGCAAAT CAATGATGCA AAGAAAACAG AAAAGAAAAA GAAGAAAAGA 60  
 CAGGATATTT CTGTTTATAA ATTAAGCTG TAATATATTT NNANTATAAT GTAAATATTA 120  
 ATGTGTAAGC TTATATTGTG TCATTGTNCT GTTTTATAAT AAAATNCTTG AGAACCTTCA 180  
 AA 182

SEQ ID NO:5559

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06609

15 SEQUENCE DESCRIPTION:

GATCTTGACC TCACGGTGTA AGAAGGGAGA GGATGGTTTC TCTTCTGCCC TCTCCCATGG 60  
 TGCCCGTGCC TCTNTGCTGT GTATGTGAAC CACCCACGTG AGGGAATAAA CCTGGCACTA 120  
 GGAAA 125

20 SEQ ID NO:5560

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06610

25 SEQUENCE DESCRIPTION:

30 GATCTTTTAA GATACAATCC TTATTTAAAA AGGAGAAGAT AACTGAGGAT TTTAAAAAGA 60  
 AGCCATGGAA AAACCTTCCTA GTAAGCATCT ACTTCAGGCC AACCAAGGTTA TATGAATATA 120  
 TAGTGATAG AAGCGATTGA AGTTACAATG TTTTATGGCC TAAATTTATT AAATAAAATG 180  
 CACAAAACCTT TGAAG 195

35 SEQ ID NO:5561

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06611

40 SEQUENCE DESCRIPTION:

GATCTTGTGC TCAACATGAT NCNTTAATAG AAGTTTTATN TTTCTGTGCA CTCTGCTAAT 60  
 CATGTGGGTG AGCCAGTGGA ACAGCGGGAG ACCTGTGCTA GTTTTACAGA TTTCCTCCTA 120  
 AATNCGCGG N 131

45 SEQ ID NO:5562

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06612

50 SEQUENCE DESCRIPTION:

GATCTAATAG CTGAACTGAT TCAAAGCTGTA ATAAGCTCAT CAATTCANT TCTATGAAAA 60

55

TGTGCTCTGT TGTACAGGA TGTTCCTGTT GGTTCCTGTT ATTCCTGGG AATTGGTAAA 120  
 CATCATGTTT CNGATGATAA CCCAGTAGCA AAANCATTG TNCTGTGTGG TACAAGCCTT 180  
 NGGGACTGNN AAANAN 196

SEQ ID NO:5563  
 SEQUENCE LENGTH:307  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06613

SEQUENCE DESCRIPTION:  
 GATCCCATAA TATAATCAT ATCCTTTATA TTNAGAATA TCTCAAATGT ATTCCTTTTT 60  
 TGTATGGTGG GTTTCCTAG GGACGTGTAA CTACAGGCTT TTAATAAGCC AAGGAAAAAG 120  
 AGAATTTTNC TTTTCATCTT ACAAATTCCA GATATCTACA AANGNTGTGA AAGCACTAAA 180  
 AGNGNNGNTT TTAAGCAGTA CTTTACCTGT TTTTCCTTTA GCAAACCAGG TTATGTGGTG 240  
 TAAAGGTTTG TNATACGTGC CACAATATAG CATATAAATG TTATGCCATC ATTCCTTCTC 300  
 TTGTTAN 307

SEQ ID NO:5564  
 SEQUENCE LENGTH:188  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06614

SEQUENCE DESCRIPTION:  
 GATCTATACA TGAACAGCAG AATGTATAAG CTAGCATTTA CTAGCATGTC TCTNATACTT 60  
 TTGTNCATTT CTGTTAATCG TCATTTCTGT CCCCTCTGCA TGGAAATTNA TACTTGTCTA 120  
 GGGTAAGAGT TTGTAGACTC TTTCAGCAGA ACAGATTTTA ATAACCAATT TATNTGTTTT 180  
 ATTTTAAA 188

SEQ ID NO:5565  
 SEQUENCE LENGTH:178  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06615

SEQUENCE DESCRIPTION:  
 GATCAGCACA TCCAAAAACA CCAAGACAAA CATCCATGTG GAGCAGAACC TNTCCTGCCT 60  
 CGGGAGTTCT GACCAGGTTT CCCAGCAGGG TGTTAAGCCT CTGTNTCTGG CCCTACCAGC 120  
 ATNCGGGTTC CACTTTTCCT AGGAGAGNGT GGAGATGGGN NGACAGGGAA AGGNNGGN 178

SEQ ID NO:5566  
 SEQUENCE LENGTH:104  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06616

SEQUENCE DESCRIPTION:  
 GATCTATCAT TTTAATTGAT TCTGAAGCTT GTATTAAAAA CTAGGCAATA NCATCATGGG 60



ATACATAGGA GANGGCACAT TTTACAATCA TNCATTNTGG CCNN

104

SEQ ID NO:5567

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06617

SEQUENCE DESCRIPTION:

GATCTGCTGA CAAAACCTGG GAATTTGGGT TGTGTATGCG AATNTTTCAG TGCCTCAAAC 60  
 AAATNTGTAT TTAACCTATG TAAAAGATAA GTCTGGAAAT AAATGTCTGT TTATTTTGT 120  
 ACTATTAAAA 130

SEQ ID NO:5568

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06618

SEQUENCE DESCRIPTION:

GATCATTTAA CATTCTGTGT ATGTAAACAAA ATATCACATG CATAAATATT ATGTATCAAT 60  
 AAAATTTTTT AATGGGCAAA 80

SEQ ID NO:5569

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06619

SEQUENCE DESCRIPTION:

GATCCGGTCA CTGCACTCCA GCCTNGGAGA CTACAGCAAG ACTCTNTCTC CAGTAAA 58

SEQ ID NO:5570

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06620

SEQUENCE DESCRIPTION:

GATCTGAGGG GTGGTGCCTA CTTCCACTGT AAGAAAGAAT CTNGGTGGAT TTGTGINTCA 60  
 AATCANGATA AGAGAAAGCCT GTTAAAGGA GCAGATGCCA TCTNCTGNCT TCCTCAAGGA 120  
 GCCAGTTAAA AAACCAAGAGC ATTCCTTTTN ATTGAAAAAT AAAATTAGTT TGTATCAAA 180  
 ANNNGGTN 188

SEQ ID NO:5571

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06621

## SEQUENCE DESCRIPTION:

GATCATAAAC CTTTGGGGA CAGAAGTTAG ATATGTGATT GATTATNATG ATGGTGGTGA 60  
 AGTCAACAAG GACTACCAGT TCACCATCCT GGACGTCCGT CCTGCCCTAG ATTCACTTTC 120  
 GGCAGTATGG GACAGAATGA AAGTCGCTTG GTGGCGTTGG ACCTCGTAAA GCACTGTTTC 180  
 AGATGGAAAA NTATAANCTA TTTTNTCTG AGCGATACAT TAACTATTT TCCCAGAAA 240

SEQ ID NO:5572

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06623

## SEQUENCE DESCRIPTION:

GATCCTCATC TTCCCAAAT ACTCGTTCCC AAAATTGACG AGCCTGACAA TGTGCATGCC 60  
 AGGCAAGGCT CTTGGGGTTC CCCTAAAACA CTTCTCTTT TAAGCCTACC ACTCACTCAT 120  
 CATGAATATA GTCCATTGTC CCAGGGTGTA AAACCTCTA TAGTGTTAAA TAAAAGANTG 180  
 ATTGGGGAAC ATTGAAA 197

SEQ ID NO:5573

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06624

## SEQUENCE DESCRIPTION:

GATCTGGCTC AGTCTACTAT GGGCAGGGCC CCCACCAAG CTGAGCCGAA TGGAGACAGC 60  
 TGAGCTGAGG CCTGACTTTT TCAATAAAAC ATTGTGTAGT TCTGGGAAA 109

SEQ ID NO:5574

SEQUENCE LENGTH:333

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06625

## SEQUENCE DESCRIPTION:

GATCTGAGCT GATGACTTGT GAGAGAAAAA GGAACAGAG TAAAGCCATG GAAGCCATGA 60  
 ACAGTAAGAG ACTGCCGCCT GGCATGGTTT CTTCTTCTGC AGAAGATGAA ACTGAGGAGA 120  
 AACAAGACAA CATCCTTCAT ACCAGGAATG GTCAAGATAA TGCAAGAAGA GNGNAGCTTT 180  
 CAAACAANTC AGNAGGCAGT CAACAAACAG NAAGGGGGNC ATTCTTCCC TGGCAGTTAC 240  
 TCATANCTGA AATTGCTTAT TGTGTACACC GGGGCTTGTA CTTGGGGNAT TTAATANNAT 300  
 TGCTCATINC CAAGCTCCNA ANNNAANTTA ITN 333

SEQ ID NO:5575

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06626

## SEQUENCE DESCRIPTION:

GATCGATTGC AGTCAGAGCC TGAAAGTATC CGTAAATGGA GAGAAGAACA AATGGAACGC 60  
 TTGGAAGCCC TTGATGCCAA TNNTNGGAAG CAAGANGCAG AGTGGAAGA AAAGGCAATA 120  
 NNGGAGCTAG AN 132

5

SEQ ID NO:5576  
 SEQUENCE LENGTH:272  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06627

10

SEQUENCE DESCRIPTION:  
 GATCTTGGCT TCTNACAGTT CTNCCTGTCC AAACITCCATC CTGTCCCTCA GGAACGGGGG 60  
 GAAAAATTCTC CGAATGTTTT TGGTTTTTTG GCTGCTTGGA ATTTACTTCT GCCACCTGCT 120  
 GGTCACTACT GTCCTCACTA AGTGGATTCT GGCTCCCCCG TACCTNATGG CTCAAACTAC 180  
 CACTCCTAAG TCGCTATATT AAGGCTTATA TTTTGNTGGA TTAGTGCTAA ATACAAAAAT 240  
 NTTTGANAGG GANNGGNGNG TNGGNGTGT NN 272

15

SEQ ID NO:5577  
 SEQUENCE LENGTH:133  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06628

20

SEQUENCE DESCRIPTION:  
 GATCATCTG TCTGGCTGCA GTGAGAGACC AACCCCTAAC AAGGGCTGGG CCACAGCAGG 60  
 GAGTGCAGCC CTACCTTCTT CCCTTGGCAG CTGGAGAAAT CTGGTTTCAA TATAACTCAT 120  
 TTAATAATTT AAA 133

25

SEQ ID NO:5578  
 SEQUENCE LENGTH:186  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06630

30

SEQUENCE DESCRIPTION:  
 GATCCACAAA CTNCCTGACA CTACTNNCAT ATTTCCACTA AAGGAGATTC AGCTACAAAA 60  
 GGAGGCCAGC CNTCGGTCTT CGTCGATGCC TGAATCAGGC ANGCCAGCTT TCCGCGTGGT 120  
 GGACACCGAG TTCTAAGCCA CAGACCGAGG CCCCAGCAGN CAGCGGCTGG AGGGNTGCCA 180  
 CACNN 186

35

SEQ ID NO:5579  
 SEQUENCE LENGTH:136  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06631

45

SEQUENCE DESCRIPTION:  
 GATCCACTGC CTCGGCTCC GAAAACTGG AATNATAGAT GTGAGCCACT GCGCCAGGCC 60  
 TGTAATTTTA TGTATCTTTA TGTGATTATT TGAATGTCCC TCTCTGACTA GATTATAAAT 120

50

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TCTAAGGATA GTGAAA

136

SEQ ID NO:5580

SEQUENCE LENGTH:66

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06632

SEQUENCE DESCRIPTION:

GATCCCCGTT CTCAAGTGTC NCNGGGAACA TAAACNGAGA TAACATGAAA AAACCTTGACA 60  
CAGAAA 66

SEQ ID NO:5581

SEQUENCE LENGTH:122

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06633

SEQUENCE DESCRIPTION:

GATCCTTNA GGCAGCTGCC TTATCTTATT CCTTNTTGTA TTTCCATACC TAGCCTAATA 60  
CCTAGCTTAT ATAAGGGAAC AGAATAAATA AACAATAAAG AAAAGTCTTT ACAGCCTCTA 120  
AA 122

SEQ ID NO:5582

SEQUENCE LENGTH:262

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06634

SEQUENCE DESCRIPTION:

GATCCAGGGC CGTTCATGAA CCACTGGGCT GGATTNGACT GTTGAGTGTG GCAGTTAATG 60  
CCCCCTCAANA AATCAAAGGA TGTCTTATAA GTGTCTTCCA AAAAAAGCA AATGCTGAAA 120  
TCCTATTGGC AAAGTAACT GAAATTGGCT GCTATATTN ATATAATCAT TTCTGCAANT 180  
CCCANTTNTT GNATACTNAT GTNGGACATG GTTANTTCTT ATTAATTTGT TGGAAATTGTT 240  
TATTGTTAGN AGTGCANATN GN 262

SEQ ID NO:5583

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06635

SEQUENCE DESCRIPTION:

GATCCTGGCC AGTACAAAGT CGTTGCTCTT GTTTTATCTT CTCTTACAGA GTCTCCCTCC 60  
CTTTATAGAA TGTCAACCAA AGAGTGCCCT CCTCCCTCT CAGCCTCCTN TNNAGCTAGC 120  
CTCCCCATCT CATCACAACG CATGTCTGTG ACCTTTGGTA ATCATTTACA GTGCCACACG 180  
GAACCCTGTA TTTTGCACAC AGCAAAACAA ACAATGTTA GCTTTATTTA TGGTATTTGA 240  
TGCTGTAAAT GGAAATAAAT ATTGTTCTTT ATAAA 275

SEQ ID NO:5584

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06636

SEQUENCE DESCRIPTION:

GATCTCTCTC GCCACGGCAC CGTCAGCTCC TTTGTGGCCA AGCTTTTCAT CTTTGTGTCT 60  
GCAGAGCTCT GAGCACTCGC TTCGCGTCGC GGGGTCTCCC TCCTGTTGCT TTCCTAACCC 120  
TGCCCTCCGG GGCCTTAATA AAGTCTTAGC AAGCGTCCCA CACAGTGAAG 170

SEQ ID NO:5585

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06637

SEQUENCE DESCRIPTION:

GATCAGCTTT NAGAGTGGTC CTAAGCAGTA AACTGGATGA TGTTCATTAA GAAAAACATC 60  
AATACTTCAT ATTAAAGTNT NAGTAGTTAC TACTGATTNG ATAATCACTT AANTN 115

SEQ ID NO:5586

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06638

SEQUENCE DESCRIPTION:

GATCCTTGTG GACTGCCACT GCTGGCTGCC TCCTCTCCAA CTCATCAGAA GAGCATTITG 60  
ACAAAGACAG AGGACTTGGA CCAGGGCATG CCCTGTTGGG GATGTTTCTG TCAGCAAGGA 120  
CATGGCATGG AATCAAGTGG GCTGATGTGT TGTATTAA ACAGTACCAA AGTGCACTTCT 180  
TCAATGTATG TTTGCCCTGCT TGAAGCAAGG CCCAAGTTGA GAATACAGTA AAGGNAACTC 240  
ATGAAAGTGA GAAA 254

SEQ ID NO:5587

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06639

SEQUENCE DESCRIPTION:

GATCCCGCCC TGACCCAGAG GAAGCCTCTA TTTATTTATT AGCTTTTGTG TACACCGTGG 60  
AATTGACCCC TTCCTCCAGG GGTCTTGGGT GGGGGAGCCC AGGGCCCTG TGACCCCTCC 120  
TTTCTTCCTC CAATCCCCAG TTTGTATTTA GCTGCCAAAT AAGATTCCCA TTGGNTCCCT 180  
GTGTTCTCTT GGGGGGTCAG GGTGCTGTCC CCTNCNNTCT GTTACATCT CCCCTNTACC 240  
CCGCTGTATC GCATATTGNV GAGTTTNTA TTTTTCGAAA ATAAAGTGAT GGAAACTCAA 300  
A 301

SEQ ID NO:5588

SEQUENCE LENGTH:206

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06640

SEQUENCE DESCRIPTION:

GATCAGAGAA AATACGGTAC ATGTCCCAT GGAGGATATG GCTTGGNCTT GGAACGATTC 60  
TTAACGTGGA TTCTGAATAG GTATCACATC CGANACGTGT GCTTATACCC TCGATTGTC 120  
CAGCGTTGCA CGCCATAACC ATTTTCTCCA GAAGCGTGGA GGAAAGATTA TNNAAGGANC 180  
AGGCTCTTCA AAAAAANNAN GNNAAN 206

SEQ ID NO:5589

SEQUENCE LENGTH:84

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06641

SEQUENCE DESCRIPTION:

GATCTTCTTC ACACCAAGCT CATGGTTACA TNCCGTGAGG TGTCATGAAG AAAGTNCCTG 60  
TCAATAAGGT TTTGTAATGT TAAA 84

SEQ ID NO:5590

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06642

SEQUENCE DESCRIPTION:

GATCTGTGGC TGGAATNGAG GGAGCGCCTG CTTCTTCTCC AGCTTGAAA AACAAATAGGA 60  
GAAGGGTCAG CTCCGCGCGG GCATCATCCC TACCAGATTG AGTGTITTC ACGCACITCA 120  
ATCACAAAAT AAAACAGTGA GAAAGTCAAA 150

SEQ ID NO:5591

SEQUENCE LENGTH:123

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06643

SEQUENCE DESCRIPTION:

GATCATCATA TCAAGATGAT ACCAAAAAGTA TGTA AAAAGA AACCTGCATT ATTTTGTAA 60  
NATTTCTTAT AGATATTCA TGGTAAGATT AGCAGTCAAT AAAGTTACTT TTTTNCCTTT 120  
AAA 123

SEQ ID NO:5592

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06645

SEQUENCE DESCRIPTION:

GATCCTGCAA ATATCTTCTT TCCAGTTTGN TATTGTCAAT TGNCTTTTGA CTTTGTCTG 60  
GTATTTTTTG NTATGTAGAA ATNTTATTT TCATGTAAGC AAATTATGA ATCTTTGNAC 120  
ACCATAAGTA TATACAATTA TGATTGTCA ATTAATAATA TTAGTACAAA 170

SEQ ID NO:5593

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06646

SEQUENCE DESCRIPTION:

GATCATCCGG TGAAGAACC AGTCCCTGNG CCCCAAGGAT GCCGGGGAAA CAGGACCNTC 60  
TCCTTCTCTG GAGCTGGTTT AGCTGGATAT NGGNGGNTTT N 101

SEQ ID NO:5594

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06647

SEQUENCE DESCRIPTION:

GATCTCCGTG GGAACATTTT CGTTGCTGTC GGTGCTGGCA GGAGCCTGTT TCTTCTGGT 60  
CCTGAAATAT AGAGGCCTGA TAAATACTG GTTTCACACT CAAA 104

SEQ ID NO:5595

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06649

SEQUENCE DESCRIPTION:

GATCGTGCTG CACAACCGGA GAAGACAGAA TTACCTCTGC TCTTTAATA TATAATGATG 60  
GCTTTAAATA AANTTAGGAG AAAATGTCAA A 91

SEQ ID NO:5596

SEQUENCE LENGTH:126

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06650

SEQUENCE DESCRIPTION:

GATCCAGAGA GTGGGGGTGA GGGGTGGGCC CTGAAGACTT TTTGTCTGTA GCTCTTGCAT 60  
ATTGAGTGTA TAAACCCGGC TTCTGGACCA ACCCAAGATG AATAAACTGG GGCAGAAAAAT 120  
TACAAA 126

SEQ ID NO:5597

SEQUENCE LENGTH:393

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

# EP 0 679 716 A1

CLONE:HUMGS06651

SEQUENCE DESCRIPTION:

5 GATCCTGGTG GCCACCAATN TGTTGGCCG GGGGATGGAC ATTGAGCGAG TCAACATCGT 60  
 CTTTAACTAC GACATGCCTG AGGACTCGGA CACCTACCTG CACCNNGTGG CCCGTGCGGG 120  
 TCGCTTTGGC ACCAAAGGCC TAGCCATCAC TTTGTGTCT GACGNGAATA ATGCCAAAAT 180  
 CCTCAATAAC GNCCAGGACC GGTTTGAAGT TAATGTGGCA GAACTTCCAG AGGAAATNGA 240  
 CATNTCCACA TACATCGAGC AGAGCCGGTA ANCACCACGT GCCAGAGCCG GNCCANCCTG 300  
 10 AGNCGACCGT ATTGTAGCTT TTAACNCCC TTNCCAGGC GACCATTTTT TONGAAAGTT 360  
 NGAGGTTTGT TTNNTGGNT TTAACCTTN TTN 393

SEQ ID NO:5598

SEQUENCE LENGTH:69

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06652

SEQUENCE DESCRIPTION:

20 GATCAGAAGG CTCTGGNCAA GAGAATGAAA ATNAGGATGA GGAATAATAA ACTCTTTTTG 60  
 GCAAGCAAA 69

SEQ ID NO:5599

SEQUENCE LENGTH:85

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06653

SEQUENCE DESCRIPTION:

30 GATCTCTTTG TCCCTGAGGT GTCAGCTGCC AACAAGAAGC ATTAGAACAA ACCATGCTGG 60  
 GTTAATAAAT TGCCTCATTG GTAAA 85

SEQ ID NO:5600

SEQUENCE LENGTH:149

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06654

SEQUENCE DESCRIPTION:

40 GATCTTGGAG TCGTGGAAC TGTGCCCCAC CGGGTCCTGC GCCGTCAGCA CAAGCCACGC 60  
 TTCACCACCA AGAGGCCCAA CACCTTCTTC TAGGTGCAGG GCCCTCGTCC GGGTGTGCCC 120  
 CAAATAAACT CAGGAACGCC CCGGTGAAA 149

SEQ ID NO:5601

SEQUENCE LENGTH:120

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06656

SEQUENCE DESCRIPTION:

50 GATCGATGTG CTCAGCCAAA TNCCTGTTT GAAATATCAT GTTAAATTAG AATGAATTAA 60

55



TCTTTACCAA AAACCATGTT GCGTTCAAAG AGGTGAACAT TAAATATAG AGACAGGAAA 120

SEQ ID NO:5602

SEQUENCE LENGTH:162

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06659

SEQUENCE DESCRIPTION:

GATCAAAACC AAAAAAATG NACCAAAGGC TTGGGTGGTG AGGGTGCTTA TCCTTTCTGT 60  
TATTTTGTAG ATGAAAAAAC TTTCTGGGGA CCTCTTGAAT TACATGCTGT AACATATGAA 120  
GTGATGTGGT TTCTATTAAA AAAATAACAC ATCCATCGGA AA 162

SEQ ID NO:5603

SEQUENCE LENGTH:56

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06660

SEQUENCE DESCRIPTION:

GATCCTGTTT TGAATAAAC ATATTTTGCC TTGAGTAAAT TTGTTGTAAG CTAAAA 56

SEQ ID NO:5604

SEQUENCE LENGTH:90

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06661

SEQUENCE DESCRIPTION:

GATCCTTCTT GTATCTTGAA GTTTTGTAAT TGGGATTCTT GGACTGATAA ATGAATCATC 60  
ACATTCTTCT GGTAAATATT TTCTTGAAAA 90

SEQ ID NO:5605

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06662

SEQUENCE DESCRIPTION:

GATCTGAAGA AGATGATGAA GTTGTGGCAA TNATTAAGGA ATTGTTAGAT ACTAGAATAC 60  
GGCCAACTGT GCAGGAAGAT GGAGGGGATG TAATCTACAA AGGCTTTGAA GATGGCATT 120  
TACAGCTGNA ACTCCAGGGT TCTTGTAACA GCTGCCCTAG TTCANTCATT ACTCTGAAAA 180  
ATGGGAATNC NGNGCATGCT GCAGTNTTAT ATNCCGNNN 219

SEQ ID NO:5606

SEQUENCE LENGTH:289

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06664

## SEQUENCE DESCRIPTION:

GATCAACTGA ACCAGTATGC CAAAACCAGG CATCCAATTT GTAAACCAAT TATGATAAAG 60  
 GACAAAATAA GCTGTTTGCC ACCTCAAAAC TTTATGAACT TCACCACCAC TAGTGTCTGT 120  
 CCATGGAGTT AGAGGGGACA TCACTTAGAA GTTCTTATAG AAAGGACACA AGTTTGTTTC 180  
 CTGGCTTTAC CTTGGGAAAA TGCTAGCAAC ATTATAGAAA TTTTGCCTTG TTGCCTTATC 240  
 TTCTTCCAAA TGTACTGTTA AATAAAAATA AAGGGTTACC CCATGCAAA 289

SEQ ID NO:5607

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06666

## SEQUENCE DESCRIPTION:

GATCTGGAGC ATTTGAANCA AGTTTATAGA AGANCATGCC AAAAACTAA GCAGGACCAA 60  
 GGAAGAGCTT TNAAGGCCTG AGGTCTGCGG AAGGTGGGAG GAGGCAGACG CCCTGCNTGG 120  
 CCCATGTGTC GGGCGTCCAC GGCAGGGCCG GCAACAAACG GCAGTATCTN GNATTCCTTT 180  
 TTTNTTTTTT NAAATTTTAA ATNCTTTGGT NITTCN 216

SEQ ID NO:5608

SEQUENCE LENGTH:350

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06667

## SEQUENCE DESCRIPTION:

GATCAGAATT ATAACCATGG AGAATTTTTT CTTCTGAGCA TTTTAATATA CTTGAAAACA 60  
 ACATTGACTT GAAAAATTTT AGAACATTTT TCAGTACCTA GTTTTATTAA ATATTACACT 120  
 TGAGAGACAC TTTTAAAAA TGTGTTAATG TCAATATGAT GAGATTTTAG CCTTCTCCA 180  
 GAACTAAGGC ATTAAGAAAA ATAGCAAATA TTAATAAATA AAAGTGTAC TTTTTCCTT 240  
 CTTTCTTTTC ACCTTTAGGT TAATATCCAG TATTATGTGT TATCCCNTTG GATAAGTATG 300  
 CTTTATTTTA CCTCNGTTAA AAATTAATAA AAATGATTTT TATTCATAAA 350

SEQ ID NO:5609

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06668

## SEQUENCE DESCRIPTION:

GATCCTNAAG AGAGCTGTCC CAGCACTCTG GCCACCAGGA GGGCCANATT CCCCANAAAC 60  
 TACCTNTTGC CCAAAGAACA TNCTCAGTAT TTGGGGCATT TCCTN 105

SEQ ID NO:5610

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06669

## SEQUENCE DESCRIPTION:

GATCCCAGTG TCTGAGTGAA CTAACAGTCC TGCTTTCAGC CACCATTGTG ACAAGACACC 60  
 CAGCACTGAA AGTCCCCTG CCAGGAGCAA GGGATTCTTT GGAAGCACCC GCCCTTTGTG 120  
 CCTTGTGGG GGAACCGGT GACGCAGTAG TGAGTGTGGA TACACCAGAG TTTGCATTGG 180  
 AAGGAATGAG TGTACCTGG GGAGGGAAGG GGCCAGTGGA CCTTTGTAA GCTTCCACT 240  
 CAATAAATG AACCTGTATG GCAAA 265

SEQ ID NO:5611

SEQUENCE LENGTH:138

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06670

## SEQUENCE DESCRIPTION:

GATCCATGTT GAACAATACA TGTAGGTTCT TTTCCACGC AATGTAAGAN CATGATATAC 60  
 TGTAAGTTGG AAAGCATTGA CCTTATTAT ATACCTGAAT GTTCCTACTA CACAAATAAA 120  
 CATATATTAA ATTCTAAA 138

SEQ ID NO:5612

SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06672

## SEQUENCE DESCRIPTION:

GATCTGTGAT GCCCACCAGC CACCCTACT CCCTTCAACC CTCCTCTTT CTGCCCATTT 60  
 CCTCCACCC CCTCACTCCC ATTTCTAGC AAAATCAGAA GATTGTGAAG AGGCCGGCTT 120  
 CAACAAAATN GGATAAANAN ATAATTTTT AAAACTTAAA 160

SEQ ID NO:5613

SEQUENCE LENGTH:217

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06673

## SEQUENCE DESCRIPTION:

GATCCTATGT NCTGCTTGCA CAGAGGCCCTT TGGATTTTAA CCCAGGAGNT TCGNGAGNTG 60  
 AGAGCTGCCC TGTCCTTAT TGAGCCTTAG CATTCCCTC TCAGGCTTCC TCTCAAGCTC 120  
 AAGGAACTCA CCCCAGATA AGAAGCTGGT GCCTCTTGTC TCTCTNATTT CAGAAACGGA 180  
 CTTTCTNATC ATGCTTTCCT ATGGTGGGTA TGNGNNN 217

SEQ ID NO:5614

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06674

## SEQUENCE DESCRIPTION:

GATCCAGAA TTCAACCTGT ATTTATAGAT GGATAATGTA NTTAGCTAAT TTTTGGTTTA 60

AATGANCTTN TTGGGTTAGC TTNCGTAAAT GNTATAATTT TTA CTGTTN

109

SEQ ID NO:5615

SEQUENCE LENGTH:267

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06675

SEQUENCE DESCRIPTION:

GATCCCCAGC TGGACTCCCC ACCCCCTGGC TTCCCCACCT CTCCAGGNGT CAAAGGTGAA 60  
 CCGAGTCCAG TATTAGCTGA ATGTCATTTC GTACACCACA GCTCAGTCAG CCCATGGGCT 120  
 TCGTGAAC TTGCTCCAACA CACTGATGTG TGGGCTTCCC ACAGCAGGAC TGACTTCCCC 180  
 CTTTCTGTTG TTTGCACATN CCCCTCTTAC TGTACTGTCA ATAGATATTT TTGAGATTTA 240  
 TTTTAAATA AATATTCAAC TTGCAAA 267

SEQ ID NO:5616

SEQUENCE LENGTH:61

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06676

SEQUENCE DESCRIPTION:

GATCAATAAT ATATAAAATN TGAGTGTGGG TTTGTATCTA ATAAAGTATG CCAACACCAA 60  
 A 61

SEQ ID NO:5617

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06677

SEQUENCE DESCRIPTION:

GATCTTGAGG CCCAACATGC TTGACTCTGC CCAAAAGTCT CCTTCTCAG CAGGATGCAG 60  
 CCTATTACAC TCAGCACAGN ATCTGGCACT CTTAGGTTCC CGGTCCATT CAAACCTCCT 120  
 GCAACCAACA AAAGGATAGT TCCTTAATAA TTTGTCAAGC CTACCTAGGG CACTGCTAGT 180  
 AGTCTTACCA TTATTCACAA ATAGGGCTGA AACATCTAAA ATTACCCAC TTAGTATTTT 240  
 ATATCCCTTC AACGTTCTAT CCTAAAGCTA ATGTTTCTTA GTGCTAATTA NAATCGTCAG 300  
 TCTATTGACA NTNTGACAAA GGGTAAGAAA 330

SEQ ID NO:5618

SEQUENCE LENGTH:84

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06678

SEQUENCE DESCRIPTION:

GATCCCAGGN TTCTGCGGAC CGACGATACG TTTAAATGTT GTTCTAGTAA ATATTCTTGA 60  
 ATGTATTAAA ATGGCTGAAA CAAA 84

SEQ ID NO:5619

SEQUENCE LENGTH:244

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06679

SEQUENCE DESCRIPTION:

GATCGTGTTT TNTAGATGAA ACCATCAAGA ACCCCCGCTC GACTGTGGAT GCTCCACAG 60  
 CAGCAGGCCG GGGCCGTGGT CGTGGCCGCC CCCACTGAGA GGCACCCAC CCATCACATG 120  
 GCTGGCTGGC TGCTGGGTGC ACTTACCCTC CTTGGCTTGG TTAATTCAAT TTACAAGGAA 180  
 GGGGTAGTAA TTGGCCCACT CTNTTCTTAC TGGAGGCTAT TTAATAAAA TGTAAGACTT 240  
 CAAA 244

SEQ ID NO:5620

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06680

SEQUENCE DESCRIPTION:

GATCTTCATT AGTCAAGNTT TAGTTATTN GTTGGCTTTT CCATGTAGAT TTCCAAGTGA 60  
 CATTAAACATA CTTNATTAAGAGAAATTTG GAGACTGTTN NN 102

SEQ ID NO:5621

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06681

SEQUENCE DESCRIPTION:

GATCGGGCCC CATGCTGTG CTGTCTAGTT TGTGTTCAAA ATGTCAGAAT AAACACAGAA 60  
 TAAATGTAA A 71

SEQ ID NO:5622

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06682

SEQUENCE DESCRIPTION:

GATCTTTTAA AAAAGTTAAA GGACATCCTA GAGCCTTAAT AGTTAAGAAG NGTTAAATTA 60  
 TCAAGCCTAT TTGTGCATT CCTTTNTTG AAAAAGGTAA GTTGCTGATT AAGTCTAATT 120  
 GGAATTGATA ATTCCATAGT CTTAGATTAN NNTGAGGATA TTTCTCCTA GATTCTCTCA 180  
 TGTNATGCCA TGCATTTATA TATCTNACCA TTAATTTTAC ACTAAGGATG CTTCAACATA 240  
 TAATAANNNGG TGCANGNTGG AAGCAANN 269

SEQ ID NO:5623

SEQUENCE LENGTH:375

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06683

SEQUENCE DESCRIPTION:

5 GATCTCCTTT TCCAGTGCTG CACACTCCTG GTTGGGAAGT TTAATGGCGT TGCAACGGAA 60  
 TCCTATATNC AGTTTCCTGT AATTTAATTG AAGAAAAATG CATCCAAATN AAGACTTTAT 120  
 TATTAACNGA CCAGATNGCA TCAGAAATCA TGTGTCTGTT ATNATTATCA GAATATGTCT 180  
 TAACTTTTTN GGGCAAAGTT AACACTGAAA GTTCTAGCTT AAGTGTGAN ACTTTTGTGG 240  
 10 GGNAAAAAN TCACTTTTGA AACTCAGACT TCAGNGTATA CCCANTAATT TAANGTTCNT 300  
 GTGAAATGGT TTAATGTGT NGGACTCGTA ATGACTGTTT TANTGGTCC AGTTTCTNCA 360  
 GNGTGGGTAN TTGGN 375

SEQ ID NO:5624

15 SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06684

SEQUENCE DESCRIPTION:

20 GATCTGATAA CTTGAATTCA GAATATTAAG AAAATGAAGT AACTNATTTT CAAA 54

SEQ ID NO:5625

SEQUENCE LENGTH:182

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06685

SEQUENCE DESCRIPTION:

30 GATCTGTTTT TATAAAGTGC TCCATGATTC TCTGAAAACA GTATACTATG TATCTAATTT 60  
 TTGGATACAG GATGGACATA CGTACTCAAA CTGTGTTTTT CAATTTGTAC TGTATTTGTT 120  
 TCTCTCGACC TGAAGTAGTG ATAGAGGTAT ATTAAGTNT TCCACTAGCA TGGTAGATTA 180  
 AA 182

35 SEQ ID NO:5626

SEQUENCE LENGTH:367

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06686

SEQUENCE DESCRIPTION:

40 GATCCTATGG NTTTTCCCGG CTGGTTGCCA CTAAGTGTACA ACATTGAGTG CCCACATCCA 60  
 TCTNTGCCAT TAAGCTTTTT TGAGACATGA GAGATGCCTC TNCCTGCTG TATGACATGC 120  
 ATTTGGGAAG TTGGAAGAA ATGACAAANT CAGGGAGAAA ACATCCAAGC TTCTTACCTG 180  
 45 TAGATAGANT CAGCCCTCAN TTGGTGCTTA TNACCAGTTA TTCANGAACA ATAACANCA 240  
 CAAANTTAGT AGACATCCAA GAGGCACATA TTAGGGCCAA AGATAGCATC ANCTGTNTTT 300  
 GAGGGANCTG TAGTTTTGCG CATTITNATG NCATTTTTAT AAAGGTACTG TNATTNTTTC 360  
 ATTGANN 367

50 SEQ ID NO:5627

55

SEQUENCE LENGTH:336

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06687

SEQUENCE DESCRIPTION:

GATCTAGTTT GACTTTCTAG TTAGTGGTGT TTTGAAGAGG GTATTTTATT GTTTTTTAAA 60  
 AAAAGGTTCT TAAACATTAT TTGAAATAGT TAATATAAAT NCATAATTNC NTTTCCCCTG 120  
 TTTATTGTAA TGTATTCTAA ATTAATGCAG AACCATATGG AAAATTTCAT TAAAATCTAT 180  
 CCCCAAATGT NCTTTCTGTA TCCTNCCTTC TACCTATNAT CCTGATTTTC AAAAATGCAG 240  
 TTAATGTACC ATTTNANNTG CTTGATGAAG GGAGCTCTAT TGCCNTTANC AGNAATTGTN 300  
 GCTAAGGTAA TTCCNAATAG AAAGCTGCTT ATTNNN 336

SEQ ID NO:5628

SEQUENCE LENGTH:364

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06688

SEQUENCE DESCRIPTION:

GATCTTCTTG ACCTTCTCCA TCATCGCCAT CCTTTCCTAA AGGCCAAGGA AGTGACCTGC 60  
 CTGCTGGCAT TGGCCAGACC ACAGCAGCAC CTCCTCCATG CAGGCCTTAA CTTTCCCATG 120  
 GTCAATGCAG TTTTATCAG CCTTGCTTTG GATAGGACCT CCAAGGACTA AGGCCTCCAG 180  
 CCCCATGTNT GACCCTTGTN ATCTCTCTGC CCCACATAAT TCTGTACTT TGCTATGTGC 240  
 TCCTAATGTA TCTAGTGTGT CCTGTGACAA CACTCATCAN ACTTCAGTGN AAATCACTTG 300  
 GTTTTAATTG ACTGTNTTNT CCTATAGACT GTAAGGNTCC ATGAGGGCAG GGCACATGTT 360  
 GGTN 364

SEQ ID NO:5629

SEQUENCE LENGTH:347

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06689

SEQUENCE DESCRIPTION:

GATCCCCTGT GCCACCAGGA GGGAGTGGCA GCTATAGTCT GGCACCAAAG TCCAGGACAC 60  
 CCAGTGGGGT GGAGTCGGAG CCACTGGTCC TGCTGCTGGC TGCTCTCTG CTCACCTTG 120  
 TGACCCAGGG TGGGGACAGG GGCTGGCCCA GGGCTGCAAT GCAGCATGTT GCCCTGGCAC 180  
 CTGTGGCCAG TACTCGGGAC AGACTAAGGG CGCTTGTCCT ATCCTGGACT TTTCTCTCA 240  
 TGCTTTGCT GCAGAACTGA AGAGACTAGG CGCTGGGGCT CAGTTTCCCT CTTAAGCTAA 300  
 GACTGATGTC AGAGGCCCCA TGGCGAGGCC CCTTTGGGCC ACTTACN 347

SEQ ID NO:5630

SEQUENCE LENGTH:318

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06690

SEQUENCE DESCRIPTION:

5 GATCAAGGTG TGAATAACTG AAGAAAAATAA CTTGCTGGCT ATATAGGAAA ATGCTGTGGA 60  
 AATGAAGTGT GTATATACTT CTGGGAGGAA CAAATTTAAT CATTTCCTCT GTTAAGCACT 120  
 AATCAGTATA GTGCAACTCC TGGTTCTGTN CTGTATTNA TATGCAACAT ATATGCTTTA 180  
 ATATTNNNT GTTTGTNCAT TAATATTNC AATTTGTTA ACCACTTTGC TGCTAAGATT 240  
 TTNCCGTCCC ATTCCCATTT NTCCCTTTAC AATNNTAAAC ANGTTTCTTC ATTAAANNCT 300  
 ATGGTGATGA AAAANAAN 318

10 SEQ ID NO:5631  
 SEQUENCE LENGTH:185  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06691  
 15 SEQUENCE DESCRIPTION:  
 GATCTGTGGG TGTTTTAAA AAAACTCAAC CTATCTGGTG TTTTATTTA ATGGATAAAA 60  
 ATGTAATTTT CCTAAGGTAG CAACTTATT CCAAATTAAT ATAGATGANA AATAGATNCC 120  
 ANTTNGACTA AATTGAAAGC TTTTNTCCT ATATTNCAAT AGCCTTTGAG AATATTGNTN 180  
 AGTGN 185

20 SEQ ID NO:5632  
 SEQUENCE LENGTH:130  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS06692  
 SEQUENCE DESCRIPTION:  
 GATCAAATAA ACTCANTTTT TTATGGTTAC TGTAAAAAGA CTGTNTAAGN CAGCTCAGCA 60  
 CCATGCTTCT NGTAAAAGCA GCTTCANTTA TCCACTGGGG TTATCTTTTG ACAACTTGCC 120  
 30 ATTATCTGNN 130

35 SEQ ID NO:5633  
 SEQUENCE LENGTH:123  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06693  
 SEQUENCE DESCRIPTION:  
 GATCTTAACA AGCTTAAAAA AGAATTTTAT GACCAGAATC CAACAAGAGC TCTATTTTGG 60  
 40 AATTGTGCCC AAGTTGGTGA TGTTACTCT AAAATTAATA ATAAAACTAC TTGTAAGCAC 120  
 AAA 123

45 SEQ ID NO:5634  
 SEQUENCE LENGTH:235  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06694  
 SEQUENCE DESCRIPTION:  
 50 GATCTGAACT GCCTCCTCCT TTCTCTGGCC TCTNCCCCT TCCCTCTTCT CTCAGCTAG 60

55



GCTAGCTGGT TTGGAGTAGA ATGGCAACTA ATTCTAATTT TAATTTATTA AATATTTGGG 120  
 GTTTTGGTTT TAAAGCCAGA ATTACGGCTA GCACCTAGCA TTTCAGCAGA GGGACCATT 180  
 TAGACCAAAA TGTACTGTTA ATGGGTTTTT TTTTAAATTT AAAAGATTAA ATAAA 235

5

SEQ ID NO:5635  
 SEQUENCE LENGTH:250  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

10

CLONE:HUMGS06696

SEQUENCE DESCRIPTION:

15

GATCACGCTA CTGCACTCCA GTCTGGGCAA CAGAGCAAAA TCCTATCTCA AAAAATATAT 60  
 ATATATTATC CAGCCCCAAA TGTTTATGGG GTTGTATTG ATGAACCCTG CATTAAACAA 120  
 TCCCACAGTC GGTGCTGCGG TGAGCCGTGA TGGGTACCAC TNCATTCCAG CCTGGGTGAC 180  
 AGANTGAGAC CCTGTCTNNA AAAAAAANGT NNAANTTGT TTCCCNATAT TTTGGNNGGA 240  
 TTNGTGGGGN 250

20

SEQ ID NO:5636  
 SEQUENCE LENGTH:131  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06697

25

SEQUENCE DESCRIPTION:

GATCTTGTGT ATTTTGTCC ATATCCAATG TTATATGAAC TAATTGTATT GTTTTATACT 60  
 GTGACCACAA ATATTATGCA ATGCACCATT TGTTTTTTAT TTCATTAAAG GAAGTTTAAT 120  
 TTAAATTGAA A 131

30

SEQ ID NO:5637  
 SEQUENCE LENGTH:58  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06698

35

SEQUENCE DESCRIPTION:

GATCTTAATG GGCAGGGTTA AGAAAGTTAT TAAAAATAAA GTTACCTATT CTAATAAA 58

40

SEQ ID NO:5638  
 SEQUENCE LENGTH:250  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06699

45

SEQUENCE DESCRIPTION:

GATCAGAGTG ATGTGTTATG CAGAGAATTA AAGGGTGATG TGATAAAGTG ATTGGGTCGT 60  
 GCTTTATGTT GGCACAAAAA ATCTGGAGTA TAAGAAAGTTG CTGACTTGGG TGATTGGGAA 120  
 GAGATTGGGA GACTGGGGGG ATTCAGANCT GAAGGANCAG GCTATAGGCT GTAAGGCAAA 180  
 ANTACTCTTG CNATGTTCAA ATTACTNAGA GGNTTNTACC NNCNTGCTTT TCTTTAAAAA 240  
 ATAAACNTTN 250

50

55

SEQ ID NO:5639

SEQUENCE LENGTH:354

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06700

SEQUENCE DESCRIPTION:

GATCTTGTTA TTGATTAAACC ATTTTCTTAT GCCTTGCTAT TGACATATTC ATGCTCTTTC 60  
TACGTCTAGT GGCTGAAAAT NTTGCATTT GTTCATTGA CTAATGGTGT GATTTTNGTT 120  
TCTATATTAT NAGACCTGTA ATGTTTTAAA ATGTATTNA TAAAATTGG ACTGGATGTA 180  
TGCTCTAGC AATACGAGGT ACTTTCTAAA CTATTAAGGG AGGGGTTGTA TCCTCATGTT 240  
GAGATAAGAT GATGGTCGTT TAANTTTNGC AATTTTTTTT GGCCTGCAGG GATATTTTGT 300  
GTTTATGTGT CCAAAANNGG ANTAANTTGG CATTCTTG TG CCAAANGTTG TTNN 354

SEQ ID NO:5640

SEQUENCE LENGTH:342

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06701

SEQUENCE DESCRIPTION:

GATCTGCATT CTGTAAAAAGA GGTACTTTCC CATGATGTAG GCATGAAGTG GTGCCAGTAA 60  
GCGTAGACCG GAAATNTTGA CTTTAGTTAA CATTGGGTNT AGCATTTCCTA GTGCAGCATT 120  
ATCAGTGGGC CTTTAAAAAT ACTTCGTAAG TACATTAGCT TTCACITTTGT NGTNAAATTA 180  
TAGCAGACTC ATTATAGAGA ACAAGTTTGC CTTGATTNN TTTAAATGA CTTCTGCTAA 240  
GCACCCAGAA GATAAANTTG ACATATTTT NTAATNTAAG CATACTTTT TNGTACATNG 300  
TGTNCATTCT TGANTAANAT GNGGTTCTGT GTTGGCTTGT NN 342

SEQ ID NO:5641

SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06702

SEQUENCE DESCRIPTION:

GATCCAGTAT AATTNCAGAT TCTNGTGTCC CATCGAAGTT TCTAGCAAGA GGA CTGTTGT 60  
CACATTTCT TCTTGGACTC ATTACTGGTC ACTGAAAACC AGAAGAAGTT GGTGAACCAT 120  
CTAAAGAAGA GAAGGCTGTG GNCAAGTATC TNCGATTCAA CTNTCCAACA AAGTCCACCA 180  
ATATGATGGG GTCACCGGNT TGATTATTT TTTGCTTCAA AAGCAGTGGN CTGTNTTNG 240  
GGATTCAAAG NGGGNAAAGT CCANGTANTG GN 272

SEQ ID NO:5642

SEQUENCE LENGTH:264

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06703

SEQUENCE DESCRIPTION:

GATCGCAATG AATTTNTAAA ATTACTATTT AANATATTGT TGAGATTCCA TTACCTCCAA 60  
 TCAGTCTTGG GACATTAGAA CAGTGGTATA ATTAAGACTG TATGTTTAAA TTGAGAAATT 120  
 TTGCACAACT TTAACAAGTA GCAGANCTAA TTGTNCACTG ATGGCTTTAA AGATGAAATA 180  
 NTTCTGTGAA TNCATGANAC TGTGAGGGNC TCTNCGTGGT TGTCTAGGTT TATTTATATG 240  
 CATNCTCATT AATNAAAGTN NTTN 264

SEQ ID NO:5643

SEQUENCE LENGTH:247

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06704

SEQUENCE DESCRIPTION:

GATCTTTTTT ATTTTATAC ACATGACAAG ATTTTACATC AAGAATAGTC AGTTAAATAG 60  
 TACAAATTTA CATTATGAG GAATGTTAAA AAAAATTCAA CTAACCAACC CACTTTTCC 120  
 TGTGACCCAT AATCCACAT TTTACAGTGC AGGGGAGAAG GGGATTAGGG GGCATNCAAA 180  
 ACAAGTCTCT CCCAAAAAGA AAAATGCAGG CATGCAGGGN CGGCGTAATC ANTNCCNGN 240  
 NNNNNNN 247

SEQ ID NO:5644

SEQUENCE LENGTH:318

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06705

SEQUENCE DESCRIPTION:

GATCCATACA GGTGTGTGT CATCTGTCCT CTTGAGGTTT AGGAGATTCT AAATTGAATA 60  
 TTCCACGGTT TGGGACAGCA TNCGGAGTT TTCCCTATNA CTTTATATTT TGTATTATGT 120  
 CAAATGTTAT GGCAGGGCCC AAATAGCATA GCCACAAGTT TGGTTTATGT GGGCATAAAA 180  
 TTCTAACCAA ACCCCAGACA TAGGGAGTCA TTTGGAGAAA GCCTGTATGT GGTGTTTTAA 240  
 CCTAATAAAG TTGATGAGAG AGAAGGGGAG AGGAAGCGAA CATAAAGCGG GTCAAGTGTA 300  
 GTGCATCTTT TGTATTGN 318

SEQ ID NO:5645

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06706

SEQUENCE DESCRIPTION:

GATCTTTTGA CATACTCACT TTGAGTGGCA TATGCCCAGG AAAATATTTA AAAGAAAGAA 60  
 AAGCTATTTT TACAAAGTTT TCTAGCAGTT CCACTCAGAT AACTTTAAGG GGGAAAAAAG 120  
 CCCAACGNTT GGNNATGGTT AAGTAAATTT NGGTGTATTG CTAGTGCTAT CNCNGANTGT 180  
 GTATGATGGC CNTNCAN 197

SEQ ID NO:5646

SEQUENCE LENGTH:210

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06707

SEQUENCE DESCRIPTION:

5 GATCCCCCGA ATAAC TTTT TCAATCAAGT TGA AAAACCA AACAGCTATG TAAAGTCCCC 60  
 AGGAGAGCTC TTTTCCCTT ATTNCTCAT TTNTTTGTT ATAACTGTT TAAATAGTTC 120  
 AAATGGTTGT NCATGCCTAG GGGATGAAAC CTATGTAATA GAAATGTACT GTTTATGAA 180  
 TAAGGAGTAA AATTNTTTTA AAAAATTTAA 210

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SEQ ID NO:5647

SEQUENCE LENGTH:372

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS06709

SEQUENCE DESCRIPTION:

20 GATCTGAAAC AGAAACCACC CTCCGGAACC GCCCAAGAAA GGNCTGCTCC ANANACTCTT 60  
 CAAGCGGCAG CATCAGAACA ATTCAGAG TCGCCAGC TCCAAGACCA GTTTTAACCA 120  
 CCACATAAAC TCAAACCATG TCAGCTCGAA CTCCACCGGA AGCAGCTAGT TTCGGCTCTG 180  
 GCCTCCAAAT CCACAGTGA ACCAGCCAG ACCCTTCTCC TTAGAGTGG AAGTAGTGA 240  
 GCCCTGCTC TGGTGGGGCT GCCAGGGGAG ACCCCGGGAG CCGGGGAAGG AAGGCCGTCC 300  
 ATCCCGTCGA CGTAGAACCT CGNGGTTTT TCAAAGNAAT TTCCACTNNG GTCTGTTTT 360  
 NCGAGGGGGG NN 372

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SEQ ID NO:5648

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS06710

SEQUENCE DESCRIPTION:

35 GATCCTTGGT ACCCCTAAAA AGATTGCCAA TTTTITCAT CTTTGCCATA TGGAGGACTG 60  
 TGACAGACTT TGGACAGTGG CCTCTTGAGT TCCTCTGCAG TTTTGACATT TAGGATTTTG 120  
 TGTCTTTTAA ACTGGAAAAT CTTCTAGCAT GTTGGGTTGT TACAGAGTAT ATTTTGTCT 180  
 GCAGCTGTTT GTTGCCCAT TCCTAAGAGG AGTTTATCCA TCCNGAAA 228

40

SEQ ID NO:5649

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06711

SEQUENCE DESCRIPTION:

45 GATCAAAACA AGATTTTCCC AGTAAGAATA TACTGGGACA TAACAAATGA AAATATTTAT 60  
 ACCAAAATAC CAAAAGTNAT TCACCTCTT AAAATATCCT ACTATAGTCT AATTAGTAGC 120  
 TTGTNCAAGA CCAAGTAACC ATTTTNNCT GCNCTTTTGA NTGATGATTA GAAATTCAAA 180  
 CAANGTATTT NNN 193

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SEQ ID NO:5650

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SEQUENCE LENGTH:176

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06712

SEQUENCE DESCRIPTION:

GATCCAAGTG CGGAANTCAC AGAAGGAACG GATTACAATT CTCCTNCAGN TAGGGAACCC 60  
CTAAGNCCAC AGAAGATAAG GAGGAAACAA TACAGAACT AGAGACCCTG GAGAAGAAGG 120  
AAGAAGAAGT AACTTCAGAG GAGGATGAGG AGAAAGAAGA AGAAGNAGAG ANGN 176

SEQ ID NO:5651

SEQUENCE LENGTH:273

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06713

SEQUENCE DESCRIPTION:

GATCAAGTTT TAAAAATTGT NCTNTTATTG TTTTAAATTA AGAACTTTTT GAACTAAAAAC 60  
CAGAACTCT GCCATAGTTC ATTGATTITA ACATGAAACA TTTATTTACA AGATGATATC 120  
AAGATTACTT TTCACAAAT AGGCACATTA TATCANCAT TTGCNCTGCT TTGTAAATTT 180  
NCCATCCAGG ATTTTGGGGT GGTATTCATG TGAAATTAAG GCAGATTCTC TAGCAGTTTC 240  
CTATAGCTAC AGTTTNNNN NTNCCCTGG NTN 273

SEQ ID NO:5652

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06714

SEQUENCE DESCRIPTION:

GATCCTGTGT GGAGAGGGAA TGTGAAATTA ACATCATTTT TTTTGGGAG AGACTTGT 60  
TGGATGCCCC CTAATCCCCT TCTCCCCTGC ACTGTAAAT GTGGGATTAT GGGTCACAGG 120  
AAAAAGTGGG TTTTAAAGT GAATTTTTT TAACATTCCT CATGAATGTA AATTGTNCT 180  
ATTAACTGA CTATNCTTGA TGTAAANCT TGTCATGTGT ATAAAAATAA A 231

SEQ ID NO:5653

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06715

SEQUENCE DESCRIPTION:

GATCAACATG GTGGAACAAA ATGATAAAGA NCAGAAAACA TTTCAATATA TTAATAATAA 60  
CTTTTCCAA TATAATCCT AAAATTCCTA TAACATAGTA TTTACAGTT TTATGAAGCT 120  
TTCTATTGTG ACTTTTATGG AATTAAGAGA TGAAGAAGAT GAGATATTT AGCATTATA 180  
TTTTTCAAAA TTATATGTAT ACTTAANANT AANGTANCT TATGCAAA 228

SEQ ID NO:5654

SEQUENCE LENGTH:182

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06716

SEQUENCE DESCRIPTION:

GATCACAACT GTGAAAAAA ACTGCACACG CAAAAGACTA CAGGGAAATA TGTAATTNAT 60  
TATNTTGT TTCTCTCAGTG ATAAGATGGG GTGGTTTCTT CTTTGTACTT TTGTATTAAT 120  
TTCTTACGGT GTTTGTATTA CTTTATAAT CAAGAACTTT GTTTAAAAA ATAAATCAGA 180  
AA 182

SEQ ID NO:5655

SEQUENCE LENGTH:93

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06717

SEQUENCE DESCRIPTION:

GATCGTAGCT AGTTTGATT GTCTTGCAA TTGTACAGAC TTTTAAAAA AAACAACCAC 60  
CAGTGAAATG TGTGTGTATA CAATAAACTG AAA 93

SEQ ID NO:5656

SEQUENCE LENGTH:331

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06718

SEQUENCE DESCRIPTION:

GATCAACATT TATGACCTAA GTCAGGTAAT ATACCTGGTT TACTTCTTTA GCATTTTNAT 60  
GCAGACAGTC TGTATGCAC TGTGGTTTCA GATGTGCAAT AATTTGTACA ATGGTTTATT 120  
CCCAAGTATG CCTTAAGCAG AACAAATGTG TTTTNCATA TAGTTCCTTG CCTTAATAAA 180  
TATGTAATAT AAATTTAAGC AACGTCTAT TTTGTATATT TGTAAGTAC AAAGTAAAAA 240  
GANCATTTTG TGGAGTTTGT ATTTNGCATA CTCAAGGTGA GANTTAAGTN TTANNTAAAC 300  
CTATAATATT TNNNCTGANA CNCNNGNACC N 331

SEQ ID NO:5657

SEQUENCE LENGTH:250

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06719

SEQUENCE DESCRIPTION:

GATCAAGCCA AAAAATCCAC CAGGAANTCC TACTGACTCT CTTTNTAAAA TATAGTCATT 60  
TAACNGTCAA AAGAGTCCCC AATAATGTCA GTNCTAAGAT TNCCTTATT TTTTAAAAA 120  
ACAAAGTAAA TGAAGACTCA AAGAGCAAGT AACTAGTCTA AATTAGATAG TCACAGGTGG 180  
TAAAGCCAGA AATCTGTCTG GNCAGTCTAA CTCTATACAN CCCAGGCTTT TAANTATTAG 240  
AAAGCNNNNN 250

SEQ ID NO:5658

SEQUENCE LENGTH:409

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06720

SEQUENCE DESCRIPTION:

GATCTCAGTA TCATACTGAG ACACCTCCCC TGAGCCTTAC CTACTTAAAT TGGTAACCGT 60  
 CCTACCAAAA TTTGTCAATT TNAATCAAGT GAGGCAAGTT GCAAGGGAGC CAGAGATACG 120  
 TGAATAAAGA AAAGCAGAAA TACTGATACT TTCTAAGAAA GAAGTTGTAA TAATTNCTTT 180  
 GGCACATTGA CTTACTGATA TCTTTTGAAA TGCATAGATG ACTCTTGTGA ACCAANGAGA 240  
 GCAGTNGTGG TTNTTCCCCG GCGCAATAAA AATGCCCTTG TGTATCACTT GCGGTTGCCA 300  
 GTCATTTCTG GTGCCAGTTG CTTTNNNTNN CCAGAGGTTT GGCCTTNATT CTTCCGAAAN 360  
 NAGGGTGATG ATTNTTGAA GNTGGGGTTT TCCTNACCAN ATTATTNTN 409

SEQ ID NO:5659

SEQUENCE LENGTH:56

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06721

SEQUENCE DESCRIPTION:

GATCTGGAAG AGTCAAGAGA AGAGAGCAGA AAGCAGGCTC TTGCTGCTAA AAGAAA 56

SEQ ID NO:5660

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06724

SEQUENCE DESCRIPTION:

GATCTAAAGA TGATGAAAA CATCAGCTAC ATTAATACT CATAAGCAAA ATAAAGGCTG 60  
 GCCTGTAAA 69

SEQ ID NO:5661

SEQUENCE LENGTH:208

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06725

SEQUENCE DESCRIPTION:

GATCCAAAGG GAAGGGACTA TGCAAGGGCA TTTATAAACG NTGGACAAGG GTTCATTATA 60  
 GAACACCANT GTNATGGACT ATCCCAAGCA TGTACCACTG TGTCTCATGC ATGGTAAAGG 120  
 TCCCATAAAT GTTATTGCTC TCTTGCACTA TAGTAGTAAT AGTAGTGGTA GCTGNTTTAG 180  
 GAGTAAAAAC AGCNAAAAAAN AGANNNNN 208

SEQ ID NO:5662

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06726

## SEQUENCE DESCRIPTION:

GATCTGAAAA AAAAGTTTCA CCGTTTGTTC TCTTACCTCA TTTTAAGAAG CATGTGAAAA 60  
 TGGGATACTA TAGACTACTG AGAATTTTCAG AAATTGAGAA CAATTTTCATA ATAAAACGGC 120  
 TATATTTGAA GAGAGANTAC ATTTTATATA ANCAGGAAAA TACATTTGAC ACTTTATGGA 180  
 ATTTNATGAG ACTTTTGTG GGAACAGAAG GTCTTCAAAT TGTAAAATGT AAAGNTTGCN 240  
 CTNTTNTTA NGTCTTTAAC AGGGGTGTNT TTCATTGTNT GTTTGGGTA TGGCTTTGGN 300  
 ATAANTCATT NTATNTNA NTTGAN 326

SEQ ID NO:5663

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06727

## SEQUENCE DESCRIPTION:

GATCTGCACA GTTTGGTTTC TGCACAAAAG TCATTTAAAA AAATCTGAGT AATTGTCAAA 60  
 TATTTAAAAGA AAGNTATTCT TCCTGGTAAG GAATACAGTT TTNAGTCAAA GTGGCCATTA 120  
 CATCCNCTTT TNAATTTACA TAATACAGNT ACTTGTGAAA GTTGTGTGGG TGTGTATGC 180  
 CAAGNNAATN CTTTTTATT GGTGCCTATA TTGTCACANT TNTNTN 227

SEQ ID NO:5664

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06728

## SEQUENCE DESCRIPTION:

GATCCACCTC CCTCGGCCTC CCAAAGTGCT GAGGATTACA GGCATGAGCC ACCACAGCTG 60  
 GCCCCTTCT TTTTATGNT TGGTTTTNA GAAGGAATGA AGTNGGAACC AAATNAGGTA 120  
 ATTTGGGTA ATCTGTCTCT AAAATNTTAG CTAAAAACAA AGCTCTATGT AAAGTAATAA 180  
 AGTATANTTN CCATATAAAT TTCAAAATTC AACTGGCTTT TATGCAAGA AACAGGTTAG 240  
 GGACATCTAG GTTCCAATTC ATTCACATTC TTTGGTTCCN GGTAATAATCN GGNGGNNTAT 300  
 ANCAATTTCT ANTTGGGGTT TNCN 324

SEQ ID NO:5665

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06730

## SEQUENCE DESCRIPTION:

GATCCTTCCA CCTTGGCCTC CCAAAGCATT GGGATTACAG GCGAGAGCAC TTGGTTGGCT 60  
 AAAATATTTA TATTTACCTG NCATNATTTG TTGATTGGG GGCTAGGGAG TTCTTAAAC 120  
 AACAATAAAA AATCTTCTGT GGCTGCAAA 149

SEQ ID NO:5666

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid



TOPOLOGY:linear

CLONE:HUMGS06731

SEQUENCE DESCRIPTION:

5 GATCACAGTC TTGAGGTCCT CTAGCAGGGG TGAGGGAGAG CAGCGACTTC AGCTGAGTCC 60  
 CTGCCAGTGG TTAAGCAAAC AATGGTTTCA AAATTCAAGG TCCCCAAATG GCAGCATTIT 120  
 ATGTTCTGAC CTGTTTGTGT TATATAGTGG TGTITTNNNN CCNCTTTGGA NCTCTTGNGT 180  
 TGTTAATAAA ATGAAATGAT TACTTTTNAA TTAANTGAA AAANGTAAAA AANAAN 236

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SEQ ID NO:5667

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS06732

SEQUENCE DESCRIPTION:

GATCGCGCCA CTGCACTCCA ACCTGGGTGA CAGACTCTGT CTCCAGAACA AAACAAACAA 60  
 ACAAAAAGAT TTTATTAAAG ATATTTTGT AACTCAGTAA A 101

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SEQ ID NO:5668

SEQUENCE LENGTH:259

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25

CLONE:HUMGS06733

SEQUENCE DESCRIPTION:

GATCCATGGA CCATCTGGGT CATGGCGCCT GGTTCAGAC AACCTGAATC AAATCTTAGG 60  
 GGTGGGGCTT TGGGATGTCA TTGTTCAATA GGCACCTCAG GAGATTCTGA GCACACCNNT 120  
 GTTTGAGAAC CACTAAATN AGGAGTGGGA AAAAAAAAAAT AGGTGTTTTG TTAATTAGA 180  
 30 GCTGAGCTGN GANGNTAATA TATTTNNNTT GTCANTGCCA TTACCAGNTA TGCAGTNTT 240  
 CTTTTATACC TACANTTTN 259

35

SEQ ID NO:5669

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06734

SEQUENCE DESCRIPTION:

GATCCTGAAG CTTACTATGC AGCCTACAAA CAGCCTTAGT AATTAAAAACA TTTTATACCA 60  
 ATAAAAATTT CAAATATTGC TAACTAATGT AGCATTAACT AACGATTGGA AACTACATNN 120  
 ACAACTTCAA AGCTGTTTGA TACATAGAAA TCAATTACAG CTTTAATTGA AACTATAAC 180  
 CATTTTGATA ATGCAACANT AAAGCATCTT CAGCCAAA 218

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SEQ ID NO:5670

SEQUENCE LENGTH:222

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS06735

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## SEQUENCE DESCRIPTION:

GATCAGATTG AGGTTATGCA TTTTGGCAA GAAAACCACG GCAATGATAT GCCCGTCTCG 60  
 GTGCATTNA TCAGGAGATA CTTGATGTCG ATGTGTCATA TTAAGGTGA TGTAAACCTT 120  
 GGTAAAGGT AGTAGCTTTC AGGTTTCTCC ATTGTAAAGT TGCTATTACT TCTTAATATA 180  
 ATAGGCTAGG TTGTACTGCT ATAACAAATA TACCTTAGTA AA 222

SEQ ID NO:5671

SEQUENCE LENGTH:86

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06736

## SEQUENCE DESCRIPTION:

GATCCTTGAA TGAAGAGGAA CCTCACCAT GGGGCTTACT GTTATAATGT TTCTTCATT 60  
 ACTGTTATTA AAAGATTAT GAGAAA 86

SEQ ID NO:5672

SEQUENCE LENGTH:391

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06737

## SEQUENCE DESCRIPTION:

GATCAGAAGC TGCCAGGAAC AAGGAGAAGA CGCTCCCCTT CCTCACCTTC CCACCCAC 60  
 ATGGCTTCTC ANTCGGGGAA AAGATACAAC TTAACITTA ACCAAGTNTT AAGTTTGTAT 120  
 TATNACATGG GATTAGATGC ACCAAAAACA ATTTCAAGTG ACTGTGGGGC ATTCTATTGC 180  
 CTGAGAATGT TCAAGAGTCC TGATATGACC TGTGTNTT ATCCTAAACA GTGAAAAATT 240  
 CATCCACCAA ATATATAGGA ATAGAGGGTG ACAGNAAGAT GCTTCTGAA AGGTATCCNA 300  
 TATTGGGGG TTTGGGTTA CATATNCTN ATGTNGGNTT TTAANCATA GCTCTTCANT 360  
 TANNNTTACT CNATCCATTN CTTGAAAGGA N 391

SEQ ID NO:5673

SEQUENCE LENGTH:210

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06739

## SEQUENCE DESCRIPTION:

GATCCTNTGT ACATGAAATG AAAGGTGCAT CANCTTGGGG GCTGGGAAAC CTGCAGTATG 60  
 GNTTACTNC GTCCCTATCA CTGGTGTGGC TGTTGGGCAA CCACTTATTG CCTGACCTAC 120  
 CTCACAGGGA TGTGTGAGG GTTTGATGAG AGAATGAATG TTAATAGGAA TTGGAAAAAT 180  
 CAAAGCATT AACACATGTA AACAGGTAAA 210

SEQ ID NO:5674

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06740

## SEQUENCE DESCRIPTION:

GATCTCAAGA AAAAGCAGGA ATTAAATAAG ACAAGGNCA GATTAANATA CCTTCCCAG 60  
 CAGGGGAAAC AGCAAACTTA AAGGTTCTAA GGCACANGAG AGCATGGCAT ATATGACGAC 120  
 CCAAAAGAGT GGCCAGATAT CCAGACATCT AGAAGGTCTA GCTAAGTNCT TAGGAAGTAG 180  
 TATAANCAGA NAAGANAAAN TTGTGGCCTC TTTTNNAAA ANN 223

SEQ ID NO:5675

SEQUENCE LENGTH:391

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06742

## SEQUENCE DESCRIPTION:

GATCATGCAC TGTGACCAC TGAGCAATCT GTGTNACACT AGAGTTCACA GGGCATTITA 60  
 AGTGTAGACG TGAGTCCTTA AACATATTTN GNTTCTCTC TCAGGTTITA AATGTTTCAA 120  
 ATGTAATTNT TGCTCATCAG TGCAGTTATC AATGCAATTT NATATTCCCT GAGGGGAGAA 180  
 AGNGGGGTCT TATTGTACAT GTCCAAGGGG GGTGATAAGA GTATTANCTG TTTAATTAA 240  
 TTGGANCAAN CCATTGTCTT AACGCAGCCA TGGTTTGANT TTGTATCTT NGGGCTGACC 300  
 GGTGCATGTA AATACAGTAT GCNCTTTGGA TGTAATCCTT NGAATGNC A GTGTTGNATG 360  
 GTAGGTTATC CTNNGTNAA CCCTTNTCTC N 391

SEQ ID NO:5676

SEQUENCE LENGTH:271

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06743

## SEQUENCE DESCRIPTION:

GATCCCTATA ACTCAAATA ACTTGTTTGT AAAAGAAAAT TTGTTTACTT ACCCATTAGT 60  
 AAGTTCCTGC ATATTCATTA TAAGATGGCA AATCAAACTT TTCTAGGATG AAGACAGCTT 120  
 ATNTTNAAGT TGTATAGTCT TAGTTGGTTT AGGGTCTCAA TTTTAATTAA TAAATNCTT 180  
 GGTTTTAATT TGCTTGTCTT TTTGAATTCC NGTTTAAATA ATNTNNNAG NGNGCAAAGN 240  
 GATGTTGAAG TTCAGATTAA NCTCTNCTGA N 271

SEQ ID NO:5677

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06744

## SEQUENCE DESCRIPTION:

GATCCTGGAA GTAATCCGGG CACACTTACA TTTGTTGTCA ACAAGAACAA TCCTTTCATC 60  
 TTCTTGGGCT TTCACATGAA CAGCCTTAAT AAAAACC GCC AGGACTCCCC AGAAAAGCAA 120  
 ATGTTCTTC ATCTTGACTT CACTTCTTCT GAAAACTGG AGCAAA 166

SEQ ID NO:5678

SEQUENCE LENGTH:386

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06745

SEQUENCE DESCRIPTION:

5 GATCACAAAT TAATGTTGGG GAAAATAAAG ATTTAATATT TCTTTAAATA GAAAAAGAAT 60  
 TTGGTTTTCC TCGTTTAAGA GCAATGAGAA AATNATGGAA TGTGACTGT NTTTGGCACA 120  
 CAGGACACGN ACCTTCATGG AAGTCCTTGC TCTGCGTGGC ATCTGTCAGC TTNACACCTT 180  
 TCATTCTTAT TCTTCACTTT TGCTGCTGAG CCTAGCTGTA CAAACTTNGC ACTTTCATT 240  
 10 GCTAATATAA ATTCAGTTTT ATTNTACCAT TTAGAGACT ACTAATGGTT AANTGTAGAA 300  
 GGNNGGGGGT GNACATGTTT TTATGTNGNG TGTNNAAAG GATATGTTTT NTNACCCNT 360  
 GTNATGGTGG CAGCTTTNTN TTTTNN 386

SEQ ID NO:5679

15 SEQUENCE LENGTH:260

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06746

SEQUENCE DESCRIPTION:

20 GATCCAGGAA GCGGCTGGAG ACATTCCTGA GCCTCCTGGT CCAAAACCTG GCACCTGCAG 60  
 AGACGCATAC CTAGAGGAAC TCTAACCCCG GTGTACCTGT ATAAACTGAA CTGTGAAACT 120  
 GTTTCGGTTA TCTCTGTCTT TTGAGGATGG CTTTGTCTTG TTGCTGGTTA ACATTCACCT 180  
 TCCTCTTTTG AGGAGTATTT TTCCATTATG TATTCATAAT AATGTTAATT TCAATAAATG 240  
 25 ACATTCATGC AGCAATTAAA 260

SEQ ID NO:5680

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS06747

SEQUENCE DESCRIPTION:

GATCAACATT CCAGGGTTGG TAATGTTGGA TGATGAAACA TTCATTTTTC CCTTGTGGAT 60  
 35 GCTAGTGCTG TAGAGTTCAC TGTGTACAC AGTCTGTTTT CTATTTGTTA AGAAAAGNTA 120  
 CAGCATCATT GCATAATTCT TGATGGTAAT AAATTTGAAT AATCAGATTT CTTACAAACC 180  
 AAA 183

SEQ ID NO:5681

40 SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06749

SEQUENCE DESCRIPTION:

45 GATCTCACTA TAGAGGCATC ACTAATTGGG GAAAGACAGA CTAGGTAATA GTCAGATGTN 60  
 ATATAGTATG TTTAANCTAT AGGATGGCAG GTNCATGANT NTTGGTTGTA TTATCCTTTA 120  
 TNTN 124

50 SEQ ID NO:5682

55

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06750

SEQUENCE DESCRIPTION:

GATCTGAAGT TGCAGGTAA GCTGTNTGG TCAACATTCC AGTGTGAAA AATAATTAA 60  
 ACAATCTTAT TCTCTTAATT CTTTGGCAA CAAAACTAT TAGTAATAGC TATTGGGAC 120  
 CAGACAAAAT CAGCTTTCAT CTATAATTCA TTGGGGATAA TGGGAGATT AGATAATGTA 180  
 TCCNGATTTA AACCTACCAG TTGTCTTAC CCCTTANGCG TTTAANATAA ANTATGCANC 240  
 AAATTTGGNG GNANGNNGTG TGNNGTTN 268

SEQ ID NO:5683

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06751

SEQUENCE DESCRIPTION:

GATCAATGCA AAAATTGTTA TATATGAACA TATAACTGGA GTCGTCAAAA AGCAAATTAA 60  
 GAAAGATTG GACGTTAGAA GTTGTCAATT AAAGCAGCCT TCTAATAAAG TTNTTTCAA 120  
 GCTGAAA 127

SEQ ID NO:5684

SEQUENCE LENGTH:221

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06752

SEQUENCE DESCRIPTION:

GATCTTTACA ATTACAGTGT AGTAGACAAT TCGGAATTAA TTTGAAACAC ATCACAACAT 60  
 AACTTGAGAA AATTCCTAN TGTATATGTA GTGTAATAA ATGTTTAAAG GCTGCAAGGA 120  
 TTGCATTATA AANNCTGTTT GTNGGCTTC TAAGTCTTIN ATNCTGTAT TGGGANTAAN 180  
 CAGATTNAG AAAATGGATA TAAGCTGANA TGTATATTN N 221

SEQ ID NO:5685

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06753

SEQUENCE DESCRIPTION:

GATCATAAAT TTTCTCAGT GTCCTTTTG TGTGAACAC ATATATCTGA AACCTGTATT 60  
 TAACCAGATA TTTCTACTCA ACTGAATATA CAAGTGTAAT TTTGATTGGA AAATTGTATA 120  
 TTATAAATGA AAATACAATA ATCAA 146

SEQ ID NO:5686

SEQUENCE LENGTH:344

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06754

SEQUENCE DESCRIPTION:

5 GATCCACCCA CCTCGACCTC CCAAAGTGCT GGGATTACAG ATGTAAGCCA CCGTGCCTGG 60  
 CCAAAGTTT CTAATACCTG TTTATAATCC CCTTCTTTGT CCTCAGGTAA CACTATCTAC 120  
 TACGTGTCTC TNCAGATTAG CTTGCATTTC CTAGAATCTA ACTTATATAA TTTAAATAAT 180  
 ATAGTATATA CCCITCTTTT GGCTTTCCTT ATTCAAGCTAT GTTGTGAGAT TCATTCATGT 240  
 10 TGTTTAGAGT ATCAGTTACT AAGTAGTATT CCATTTTNGG CTATATCAAA NNTNGTTTGN 300  
 CCATTACCT ATTAANGGGC ATTTNGCACT GGTCCAGNN TGAN 344

SEQ ID NO:5687

SEQUENCE LENGTH:132

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06755

SEQUENCE DESCRIPTION:

20 GATCTCTGTT TTGACTAAAC TAGAGGAAAA ATNATTGGAT GTGTTTATTC TTTCTAAGC 60  
 AGAATGGTTT AACTTTGTAC TCTTTGAAAA ATAATGCTGA TTTATAAATC TCTGCCTATA 120  
 NCAGAATGGA AA 132

SEQ ID NO:5688

25 SEQUENCE LENGTH:244

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06756

SEQUENCE DESCRIPTION:

30 GATCCTGCTG TGGCACGGGG CCTATGTGTC TCTGTGCGGT CTGCTGTGAA GACATGATGC 60  
 TCTATTATT GTAGAGAGTG ACTTTATTG CTTTCTAGAA TTGTTTATAA CAGATGGTAT 120  
 AAGAGAGGTA ATAAACAGAG AAAAATCTAT GCTTGTAAG AATACAAAAG TTAATTTTAC 180  
 CTACTATAAT ATGGCTGGCT GAANCTTATT TCCTCTCTNN GNAATAAATG TTCTANTGGG 240  
 35 CAAA 244

SEQ ID NO:5689

SEQUENCE LENGTH:143

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06757

SEQUENCE DESCRIPTION:

45 GATCTTNTCT ATACCATTTA ATGTAGAAAA ACTAATTTTC TATAATTNTN TCTATTAAAG 60  
 GTGACATTAA TGCTGATAGA AAAATATTCC CACATATATC TNACTTGAA AACTTATAAA 120  
 AATTGTGCTG TCTTTAAAT AAA 143

SEQ ID NO:5690

SEQUENCE LENGTH:219

50 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS06758

SEQUENCE DESCRIPTION:

5 GATCGCAAAG GGATTGTTCT TATAAAAGTG GCATAAATAA ATGCATCATT TTAGGAGTA 60  
TAGACAGATA TATCTTATTG TGGGGAGGGG AAAGAAATCC ATCTGCTCAT GAAGCACTTC 120  
TGAAATATA GGTGATTGCC TGAATGTCGA AGNTCTACTT TTGTCTATAA AACACTATAT 180  
AAATGANTTT TAATAAATTT TTGCTTCAGC ACTTGGA 219

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SEQ ID NO:5691

SEQUENCE LENGTH:292

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS06759

SEQUENCE DESCRIPTION:

20 GATCTAGATG AGATTACCCA TAGCAGGGAA AATAATTCAT CACCTACCA AGACTGTACG 60  
GAAAGGTGTG TTATTTTCAA AATTGCATT TAGTTGCAC ACATGTAAAT NATTATCCTA 120  
TGTTAATCTA ATTGACAATT CANTTAGCTC CGCATCCTAA GACTTAAAC TAGCAATTCC 180  
TATGCAAATC ATCTGCTTAA CTGANCTACA AACGTTTTTC ATTAATTCAT TCTTTGATGA 240  
CATATTCCAT GTTATATANT ANTNCANAAT AAAGTTAATA TACTACCCCA AA 292

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SEQ ID NO:5692

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06760

SEQUENCE DESCRIPTION:

30 GATCCTCTCG CITGTTCACT GGGGCATGTA CAGTGGGCAC GGAAGCTGG AATTCGTATG 60  
ACGGAGCTTA TCTGAACCTAC ACTTACTGAA CAGCTTGAAG GCCTTTTGAG TTCTGCTGGA 120  
CAGGAGCACT TTATCTGAAG ACAAACTCAT TTAATCATCT TTGAGAGACA AAATGACCTC 180  
TGCAACAGA ATCTTGATA TTTCTTCTGA AGGATTATTT GCACAGACTT AAATACAGTT 240  
AAATGTGTTA TTTGCTTTTA AAATTATAAA AAGCANAGAG AAGNCTTTGT ACACACTGTC 300  
35 ACCAGGGTTA TTTGCATCCA AGGGAGCTTN 330

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SEQ ID NO:5693

SEQUENCE LENGTH:143

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06762

SEQUENCE DESCRIPTION:

45 GATCANAGGT CTTGAGGTCT TTACATCTTG ACATATACAC TGAAAAAAN GGGGGTTGTA 60  
TGATNAATG TGCTACCCAA ACCNTTGGCC GCCACTTTTA AATTCTCAGA TTGCCCTGAA 120  
TTTTGNCAC TTNAAATAAT GNN 143

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SEQ ID NO:5694

SEQUENCE LENGTH:273

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06763

SEQUENCE DESCRIPTION:

GATCTTAATG CTTCTCCTGC TCTGTAAGCC TCTNAAGAGC AATATCTAAT TAATTATTAC 60  
 TGTAATTTTT TAAAAGGCTT TAAAGTGCCT CAGGGGTCCC CTGAAACTAA TTTCCTATTT 120  
 CTGGGATTCC CTGGATTTCAT TATATGNNAT GGTGACATGA TTAGAGGAAT TCNTTTTAAG 180  
 TATGAAANTT GTCCCTTTCC TNCITCAGTA CTTGCCTCCT NGCTGGCATT GANTTAACAC 240  
 AGGGACAAAA TTTGGTTAAT TNNTNATTNC NAN 273

SEQ ID NO:5695

SEQUENCE LENGTH:337

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06764

SEQUENCE DESCRIPTION:

GATCTGTAAT ACAGGAACCA AATGTCATGC GTCATACATG TGGGTATAAA GTACATAAAA 60  
 TATATCTAAC TATTCATAAT GTGGGGTGGG TAATACTGTC TGTGAAATAA TGTAAGANGC 120  
 TTTTCACTTA AAAAAAATGC ATTACTTTCA CTTANCACTA GACACCAGGT CGAAAAATTT 180  
 CAAGGTTATA GTACTTATTT CAGCANTTCT TAGAGATGCT AGCTAGTGTT GAAGCTAAAA 240  
 NTAGCTTTAT TTATGCTGGG NTGGTGATT NTTTTGNCA AAATTTTTNT AGNGCGAANC 300  
 ATGTGGTGNN TAGCTTGGNN ATGAANGAAT TNTGNCN 337

SEQ ID NO:5696

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06765

SEQUENCE DESCRIPTION:

GATCTAGAAG TTGCAACATT CGTTTGATAG GAATTCAGA AAAGNAGAGT TATGAGAATA 60  
 GGGCAGAGGA CATAATTAAG GAAATAATTG ATGAAANCTT TGCAGAACTA AAGAAAGGTT 120  
 CAAGTCNCGA GATTGTCAGT GCTTGTGAG TACCTAGTAA AATGNATGA AAAGAGGCTG 180  
 GCTCCTAGGC ACATCTTGGT GAAATTTTGG AATTCCTAGT GATAAAGGGG AAATNATAAG 240  
 GGCTNCTAGN GGGNGANGGG AATTNCNTGC CAGGGANCAG GNTCAGTTGN 290

SEQ ID NO:5697

SEQUENCE LENGTH:393

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06766

SEQUENCE DESCRIPTION:

GATCAITCCT GTATTAACT TTCATATGCC AAAAGGGTTT GTCCCGTTTN ATCTGCCATC 60  
 AGTGTTTGAC CTGTTTAGGG CAGAGGCAAT AAGTCAGAAG TCTTGAAGTT GAAATAGTTA 120  
 TATGTGTGTC ATTGGACTGG ATTATAACA GCTGTCTTGG ACTTCCCTC TCTTAACACT 180  
 GACTGGTNAT CAGTATCATT AGTGAAAAAG NAAGCAAATT GTTTGTNATC ATCTCTTTAG 240



NCAGGTAAGC TGGAATGGGT GGGGCTTTAA ATAATANAAN CATGCGCATN GTTGGCTTGT 300  
 GTATGGGCCT NCTCTTGGGA TTCCTNGTNG TNATGGGCTT GGTATTTTGG GTNCNTGATT 360  
 TTGTCCANNG GCANTNCCAG GTGGGTGCCA NCN 393

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SEQ ID NO:5698  
 SEQUENCE LENGTH:176  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS06767  
 SEQUENCE DESCRIPTION:  
 GATCCANGNT AAGAGGCNCC CCCCCGACCA GCAGAGGCTC ATCTTTGCAG GCAAGCAGCT 60  
 GGAAGATGGC CGCACTCTTT CTGACTACAA CATCCAGAAA GAGTCGACCC TCAACCTGGT 120  
 CCTGCGCCTA NGGGTTGCTG TAAATCTTCA ATCAATGCAA TNNCNATGCC CATNAN 176

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SEQ ID NO:5699  
 SEQUENCE LENGTH:178  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS06768  
 SEQUENCE DESCRIPTION:  
 GATCTACTCA GACAGGACCT TCGCACCTTT GCCAGAGTTT GAGCAGGAAG AGGATGATGG 60  
 TGAGGTAAGT GAGGACTCTG ATGAAGACTT TATACAGCCC CGNAGAAAAAC GCCTAAAGTC 120  
 AGATGAGAGA CCAGTACATA TAAAGTAAAA TNACATGGAT TTAAATCAAT TGTTTAAA 178

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SEQ ID NO:5700  
 SEQUENCE LENGTH:233  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS06769  
 SEQUENCE DESCRIPTION:  
 GATCGTTTCT TTAGAAAAGT GGCATTGGCT TTTGAATATG AAATCTTCTC ATAGCTGCCT 60  
 AAAAAAGACT AGAATGTATA TGGATATCAG AAACCTTTAA TAATACATAA TTTATGCAAA 120  
 GATAAGATAA AGCAACATAA CACTAATTAT AAAACTATTT TTTAAATCCC ATTTTAAATG 180  
 ATAANTATAC ATTTNTATTT AATTCCTTT GANTAAAACA NTTGTAAAGT AAA 233

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SEQ ID NO:5701  
 SEQUENCE LENGTH:374  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

40

CLONE:HUMGS06770  
 SEQUENCE DESCRIPTION:  
 GATCTTCATC TGAATATGAC ATAAAAACAA CTTTATACCC AGAAAGTTAT TGATAAGTTC 60  
 ATACATTGTA CGAAGAGTAT TTTTGACAGA NTATGTTTCA AACTTTGGAA CAAGATGGTT 120  
 CTAGCATGGC ATATTTTCA CATATCTAGT ATGAAATTAT ATAAGTNTTC TAAATTTTAT 180  
 ATCTNGTAGC TTTATCAAAG GGTGNANTT ATTTNNTTCA TACATATTT NGTAGCACTG 240

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ACAGATTTC ATCCTNGTCA CTACCTTCAT GCATAGGTTT NGCAGTATAG TGGCGCCACT 300  
 GTTTGAATC TNATAATTNA TACAGGTCAT ATTANTNTAT NGCCCTTAAA AANATCAGT 360  
 TGTCCAGNG GAAN 374

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SEQ ID NO:5702  
 SEQUENCE LENGTH:452  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06771

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SEQUENCE DESCRIPTION:

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GATCTCCTG CCTCAGCCTC CTGAGTAGAC GGATTATAGG CACCTTGCCC AGCTTCTATA 60  
 GCAGCATTTT TTTCTAACAC CTAAAAAATG GAAACAAGCC AAATGCTCAT CCACTGGTAA 120  
 ATGGATAAAC AAAGTGTAGT CTTTCTATAC ACTGGAATAT TTGGCTATAA AANAGANTGA 180  
 NATATTGATA CATGCTACAA CATTGATGAN CTTCAAAAAC ATGCTAAGAG AAAGCCAGTC 240  
 ACAGAANAAT ACATNGTATT CTATAAGAAT GTCTAGGGAN CGTNAATCTA TATNGGCAGA 300  
 AGGTAGGTTN GTGGTTGCCT AGGGCCCGGG GGGAAAGGGT TAGGGGGCCT NGGGGGTGNC 360  
 AGCTTATGGG GCTGCTAATN GGGCCTNCCG NTTCTCTTN GGGGGTTGGT ACCCTGCTAA 420  
 ATTGNCCTNN TTGCNTGGT TTTNNCCCG GN 452

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SEQ ID NO:5703  
 SEQUENCE LENGTH:257  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06772

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SEQUENCE DESCRIPTION:

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GATCTGCTG TGCACATGCC TCTGTAGAGA GCAGCATTCC CAGGGACCTT GGAAACAGTT 60  
 GAACTGTAA GGTGCTTGCT CCCCAAGACA CATCCTAAAA GGTGTTGTAA TGGTGAAGAC 120  
 GTCTTCCTC TTTATTGCCC CTTCTTATTT ATGTGAACAA CTGTTTGCT TTTTGTAT 180  
 CTTTTTAAA CTGTAAAGTT CAATTGTGAA AATGAATATC ATGCAATAA ATTATGCAAT 240  
 TTTTTTTCA AAGTAAA 257

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SEQ ID NO:5704  
 SEQUENCE LENGTH:77  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06773

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SEQUENCE DESCRIPTION:

GATCANGAAG CTATTTTCNA TTCTGGGGAA CGATTATAAC TTAAATNATT GTTTTAATAA 60  
 AAATTCTAAG CTGGAAA 77

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SEQ ID NO:5705  
 SEQUENCE LENGTH:278  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06774

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## SEQUENCE DESCRIPTION:

GATCCAATTT CTITGTGGTA CCTGCAGTTT AAAAAATAAT TTGACTTCAG TGAGCATATT 60  
 GGTATCTGGA TGTCCAATT TAGAACTAAA CCATATTNT TACAAAAAGA TATTAATCCC 120  
 TCTACTCCCA GGTCCCTTT ATATGTTAAG ATATAATGCC TTTGAGGGGG GAAAAATAA 180  
 ACCTAGGGGA GAGGGGAGTT TCCTGTAGTG CTGTTTCATT AGAGGATTTC AGTAAATTAA 240  
 ATTCCACAGC TAATTGAATA AATAATGGNA CCTTTAAA 278

SEQ ID NO:5706

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06775

## SEQUENCE DESCRIPTION:

GATCTGCATA TNATGTATTA GGTTAGGTCA CAAAGGTTTT ATCTGAGGTG ATTAAATAA 60  
 CTTCTGATT GGAGTGTGTA AGCTGACCNA TTTCTAATAA AATTTTAGTT GTACACTTTT 120  
 AGTNGTCATA GTGAAGCAGG TCTAGAAAAT AAGCCTTTGG CAGGGAAAAA GGGCAATGTT 180  
 GATTAANCTC AGTATTAANC CACATTANTC TGTATCCCAT TGTCTGGCTT TTGTAAATNC 240  
 ATCCAGNCA AGNCTAAGTA TGTGGTTAA TAGGNATCCT TTTTTTTTTT TTNAANGCCT 300  
 AANNGGGN 308

SEQ ID NO:5707

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06776

## SEQUENCE DESCRIPTION:

GATCGTAACC CCTTGTGAC TAATCTNGCC GTGGTTTTGT NTAGGTCTGC AGGAAGGAAG 60  
 NCTNAAAAG CGGACGAAGA TTTTNACTTA AGTGGGACTT TGTN 104

SEQ ID NO:5708

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06777

## SEQUENCE DESCRIPTION:

GATCCTAGTA AGTCANTNGT AGTTTACTGG TGANGTGAGC ATTNTAGATT CCCCCNTTAT 60  
 CACTAATCAC ACAACAATTT TAAGAAGTAG GCTATAAAC AAAAAAGGT TGCTGTTTC 120  
 TATTTTAAA TAAACNN 137

SEQ ID NO:5709

SEQUENCE LENGTH:333

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06778

## SEQUENCE DESCRIPTION:

GATCTCATTT GCTGGAATGA TTGATTAAAG AGTAAAATTA GCCACTGCGT NTGNTNGTG 60  
TATAGTAACC GGTITNTTGG CACTTGTCTG TGGCTGAAAC ACTTACCTGC AGTGGAAAGC 120  
CGTGCAAGGA GGAGGTAAAC ATTGGAGATG TTTGTNAAAA TATTACTCTT GCTGTGAGGT 180  
TTTAGTTTGT TTTGAATGAG AAAAGACTAA GTAACITAAT CCATCTCAAT GTAGTGTITT 240  
AATANNNGG GNNCTAATA TTTGANATGG GTCTCAGACA TGTCTACAAA TATGGGTACT 300  
ATTTTNTGTC CCGTGTATTT TCACATTNA NAN 333

SEQ ID NO:5710  
SEQUENCE LENGTH:126  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06780

SEQUENCE DESCRIPTION:  
GATCCTTATA AATNAGAAAC ATGCAAGCTT CAGCTGCTCG AGTTCATAG TGTACCTAA 60  
ATCGTATGTG TATGATACAT AAGGTTATGT ATTAATTGTA GCCCGGTGNN CNTCGNGGGN 120  
ACCTTN 126

SEQ ID NO:5711  
SEQUENCE LENGTH:133  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06781

SEQUENCE DESCRIPTION:  
GATCCGGCAA ACAACCACC GCTGGTAGCG CGTTTGTNTT TGTTCGAAG CTCAGCTGC 60  
TCGANTCTA TANNGCCACC TAAATCGTAT GTGTATGATA CATAAGGTTA TGTATTAAT 120  
GTAGNCGTTN GCN 133

SEQ ID NO:5712  
SEQUENCE LENGTH:116  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06783

SEQUENCE DESCRIPTION:  
GATCCTTTTA AATNAAAAAT AAAGTTTTAA AAAAAACAT GCAAGCTTCA GCTGCTCGAG 60  
TTCTATAGTG TCACCTAAAT CGTATGTGTA TGATACATAA GGTATGTAT NCNNNN 116

SEQ ID NO:5713  
SEQUENCE LENGTH:268  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS06784

SEQUENCE DESCRIPTION:  
GATCTTCTCA ATGGGTGGNC TCCTGGTATT CGTGGGACCA CCTGTGGGCA CAGGAGCCAA 60  
TGTGGTTTCA ACAGCTGGGC AGAGGGAGCT GCTAGTCAGC TGTTCGCCA CACTCTGCCT 120  
GTCATGGTGA TTTGNACCCT ACCCCCTGG TCCCAGNGNC CTGGGGCTCA CTTGATACCG 180

TTGAAAGTAA GCACAGNCTG CATGTNCTCA GGNAGGNCCT GGGGCTCAGG GCACTCGAAG 240  
 NCATCAATGN TGGGNACANT GTTNTTGN 268

5 SEQ ID NO:5714  
 SEQUENCE LENGTH:129  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06785  
 10 SEQUENCE DESCRIPTION:  
 GATCTCAGAA TACAAATTTA AATAAATTAA TTTAATTCTC AAAACACCCT TGATTGGAAC 60  
 TTACAGCTGG CCCTCTGTAT TCGTGGGTTT AACCAATCAC TAATTAATAA TATTGGAAAC 120  
 AANNNNNNN 129

15 SEQ ID NO:5715  
 SEQUENCE LENGTH:214  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 20 CLONE:HUMGS06786  
 SEQUENCE DESCRIPTION:  
 GATCCTGCAT TTATGGTGTA GTTCTGAGTC CTGAGACTTT TCTGCGTGAT GGCTATGCCT 60  
 TGCACACAGG TGTGGTGAT GGGGCTGTTG AGATGCCTGT TGAAGGTACA TCGTTTGCAA 120  
 25 ATGTCAGTTT CCTCTCCTGT CCGTGTGTTT TTAGTACTTT TATAATGAAA AGAAACAAGA 180  
 TTGTTTGGGA TTGGAAGTAA AGATTAATAAC CAAA 214

SEQ ID NO:5716  
 SEQUENCE LENGTH:253  
 30 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06787  
 SEQUENCE DESCRIPTION:  
 GATCTAATCC CTTCAAGGAA GTGATAACAC TGGAGTGGTA ACAAGAGGAG CAGGAAGCAA 60  
 35 GGGCAGCCCT GGTTCCTCAT CCCCATGTGT TTCAGGTGGA ACAGGAGGAA CTGGNCCAGG 120  
 CCAGGCCCTCA TCCTCCTGGA CCCAGCAGGG GCAGAAGGAG GAAGGGACTG GTCCAGGCAT 180  
 GGGTCCCTTC CCNNTGCTCC ATGGGCANCT CTGCTGTATT GATATCACTA GTAAAGTCTG 240  
 TCTGCACTGC AAA 253

40 SEQ ID NO:5717  
 SEQUENCE LENGTH:332  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 45 CLONE:HUMGS06788  
 SEQUENCE DESCRIPTION:  
 GATCATGTCT TTCAGAATCC ATGTACATAT AGGCTGTNCT AGCCACAGTG GTAGATTAT 60  
 GATTACATC CGAAAGTGTG CCTTAGTTAT CAATTAAACA TTTCTTAGT ATTCATATCC 120  
 50 CTTTCCTTAC CATATACCTC AGTGTATCCT TCCTGTGTCA AGCCTTATAA ATCATGTAAT 180

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TTAGTGCCAC TCATGTAAAT CAGTAAATC ACAAAGGTCT ATTTAATGAA AACGATTAC 240  
 CAATGTTGTT TTTTTTTAAAC AGGANAAGNA NTAGNAGCAC NTTGTCATT TTNAGANGGN 300  
 GGNNTTGTG GGNNTGGG GGNNGNTTG GN 332

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SEQ ID NO:5718  
 SEQUENCE LENGTH:284  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06789

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SEQUENCE DESCRIPTION:  
 GATCATGCCA CTGCACTCCA GCCTGGGCAA CCAGGTGAGA CCCTGCCTCA AAAATAATAC 60  
 AATAAAAAGT AAAAGCAGCC CTGGGGAAAT GGAGACAGTG GACAAAGCAG GCTGGGGCAC 120  
 CAGGTGTGCA TGTGGGTGTG AGTCTGTGAT GAGAGCTGTC CTGANTGCC CTTAACGCCAC 180  
 TGAAGTGTAT GCTGGAAAAC AGTGACAACA GTGGATTTTG TTATATAGAC AATTANANN 240  
 GTATANCACC CAGAAANANT GTGTGNTGT TGGGNGTGG TGNN 284

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SEQ ID NO:5719  
 SEQUENCE LENGTH:253  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06790

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SEQUENCE DESCRIPTION:  
 GATCTTTAAC TCCTCCTGGC TGCACCTGGG TAGGGATGGT GGCATCGATG CCCCTCTGTC 60  
 TGCTGAAGGA CCTGTGCTG CTTCTGTCTT TTCACCCCTC CTGGCTGAT GACCCAGAGC 120  
 CCTCTGATGA TGGCATTCTC CTGGCAAGAG AAAAAGACTT AACTAGACTT CTGAAGTTGA 180  
 ACAGTTTCAG GTTATATTTT AATTTNNNT TTTTGTGAC NGGTNCNGAT NCTAATACAT 240  
 TNCACCNNGC AAA 253

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SEQ ID NO:5720  
 SEQUENCE LENGTH:389  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06791

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SEQUENCE DESCRIPTION:  
 GATCCACCCA CTCGGGCCCC ACAAAGTGCT AGGATTACAG GTGTGAGCCA CCATGCCCGG 60  
 CCCAGAATAC TTTTAAAAG AAGAGCAGGT TAGAGGAAAG AAAAAATTG ATGCTGAATG 120  
 TGGTGATGAA AGCATGTTT TAAATGGGA AGCAGATGCT TAANGAGGAA AGACTAATCT 180  
 GGGATTTTGC CCCATTCTC TGGNTTTTCA CTCCTATATT TNATTCTCAC AATCGTGTG 240  
 TCACATAGTG CANAANACAN ATTCTTGTA AAGTCCCAG GGGTTTATGC TTGGGTGAAA 300  
 GTTTTAGCCT GAGTATTTT CTNCTCTAA AAANAGGTGG GGANTGNGNC ATTTGAGGNT 360  
 NTNACCTTT TAATTGTNCT GCTATNGGN 389

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SEQ ID NO:5721  
 SEQUENCE LENGTH:174  
 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS06792

SEQUENCE DESCRIPTION:

5 GATCTGGTTG GGGTTTGGG TTTTGTGTTG TTGTTGTTTA TTTGTTATTT TAAAGGTAAA 60  
 TTGCACTTTT AAAAAAATAA TTGGITGACT TAATATATTN NCTTTTTTNC TCACCTGCAC 120  
 TTAGAGGAAA TTTGAACAAG TTGGAAAAAA ACANNNTTNG TTTCAATTCT ANGN 174

SEQ ID NO:5722

10 SEQUENCE LENGTH:367

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06794

15 SEQUENCE DESCRIPTION:

GATCCTATGT TGCTGGAAC TGCACAAACAG GATGTTGTGC TCAATNACCC CATGTGAGTG 60  
 CGTGGACTCC TGGGAGCTCC TGCTCCNTAC AGTGGGCTGC AACTCCTGTA CTTGAAGCTG 120  
 AGACCTCATA TGACGTGGCC TTCGTGTTGT CAGAGAGTGT CTGGAAGCTG CTGTTGCCAT 180  
 CTTGAACAAC TCACCAACCT CCAACCCAGA GCCCCAGTGA GAGAGGAGCA TTTGGCCTCC 240  
 20 TGCTTCCTTC TGTGGCCTCT GCCGGGCTCC ATTNCCAAGG AAAAGAGAGG AGCTTGGGCT 300  
 CACAGAAAGA GAAGGGGATG AAACCCCAAG NGGCCCTATC TTTTGGGATT TACATGGGAT 360  
 TTTTATN 367

25 SEQ ID NO:5723

SEQUENCE LENGTH:311

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06795

30 SEQUENCE DESCRIPTION:

GATCCTGAGT AATCCTTTTA GAGCCCGAAG AGTCAAAACC CTCAATGTTT CCTCCTGCTC 60  
 TCCTGCCCCA TGTCACAAA TTTCAGGCTA AGGATGCCCC AGACCCAGGG CTCTAACCTT 120  
 GTATGCCGGG AGGCCAGGG AGCAGGCAGC AGTGTCTTC CCCTCAGAGT GACTTGGGGA 180  
 35 GGGAGAAATA GGAGGAGACG TCCAGCTCTG TCCTCTCTNN NNNCTCCTNC CTTCAGTGTC 240  
 CTGAGGAACA GGACTTTCTC CACATTGTTT TGTNTTGCAA CATTTTGCAT TAAAAGGAAA 300  
 ATCCACTGAA A 311

40 SEQ ID NO:5724

SEQUENCE LENGTH:342

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06796

45 SEQUENCE DESCRIPTION:

GATCCTCCGG CCTCAGCTGG TCTACAGGCG GGTAAATCAAG GGAAGGGAC TACAGGCQCG 60  
 CCCTGCCGCG CCGGGACAAG TTTTGTATTT TTAGTAGAGA CAGACTCTCC CTGTGTTGCC 120  
 CAGGCTGGTC TCCAATCCTT GGGCCTCCCA AAGTGTGGG ATTACAGGCG TGAGTCACCC 180  
 CTGCAGGCCA CAGCTTTGCT TTTTAAAAAG ATTTCTGCAT AACTAAAAAG ACAGGAAATT 240  
 50 ACGAGCATAC GGNAACTGAT TTCTGCTTTC CTGAATTTTC TAAATGTATT TAATGGGCAT 300

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GGTTCCTTTG CAATGAAAAA GTAATANATT NGGGTNTCAT CN

342

SEQ ID NO:5725

SEQUENCE LENGTH:312

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06797

SEQUENCE DESCRIPTION:

GATCCGCCGA CCTCGGCCTC CCAAAGTGCT GGAATTACAG GCGTGAGCAC GTGCGCCTGG 60  
 CCAAGAATGG ACATTTTITA AAAAAACATC AGTACTTCCT ACCACTGCTG CATGAGTATA 120  
 ATGCTCCGGA ATTATCAGAA AGCATAATGC AGAAATACGA ATTAGTGGAA CTTAATCATG 180  
 TGCCATATAA GCTTACCTAA CAAACAGTTA TATCCCTATT CCTCAACTGA ATGTCTTTTA 240  
 ATAAATNAGA NTTTTATCATT TNNNGTANGG GTGNGTGTGN GGNTGGNNGG GGGGGGGGNG 300  
 GGGNNGGGGN GN 312

SEQ ID NO:5726

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06798

SEQUENCE DESCRIPTION:

GATCCTAGGC TCCCTCCATC CCTGGTATGT GGTCCCTCATT TTCATATAGA CCAAGAGCTA 60  
 GAGCTCCAGT TACCATTCTT TAAAGTATAT TTTAATGCCA AATAGTGAAT AAAGGTGGCC 120  
 AGAAAAATCA AA 132

SEQ ID NO:5727

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06800

SEQUENCE DESCRIPTION:

GATCANCTAA GGTCAAGAGT TNGAGACCAG CCTGACCAAC ATNGTGAAAC CCTGTCTTTA 60  
 CTAATAATAC AAAAAATTAC CAGGCACCTA TAATNCCAGC TACTTCAAAG GCTGAAGCAG 120  
 GAGAATCACT TGANN 135

SEQ ID NO:5728

SEQUENCE LENGTH:334

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06801

SEQUENCE DESCRIPTION:

GATCAGTGGG CCTCCAAGGA GGGNCTGTAA AATGGAGGCC ATTGTGTGAG CCTATCAGAG 60  
 TTGCTGCAAA CCTGACCCTT GCTCAGTAAA GCACITGCAA CCGTCTGTNA TGCTGTGACA 120  
 CATGGCCCCT CCCCTGCCA GGAGCITTGG ACCTAATCCA AGCNNCTCTT TGCCAGAAA 180  
 GAAGATGGGG GAGGAGGCAG TAATAAAAAG ATTGANGTAT TTTGCTGGAA TANGTTCNGA 240



TTCNTCTGAA CTCAAACCTGA GGAATTTCAC CTGTNANCCT GNGTCGTACA GANAGCTGCC 300  
TGGTNTATCC AAAANGCTTT TTNTTCCTCC TGTN 334

5 SEQ ID NO:5729  
SEQUENCE LENGTH:158  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS06802  
SEQUENCE DESCRIPTION:  
GATCCTGTAA GCAGACTTGG GCAGTCTCCT TTAGAAATAG GTTGCTGTA CATGTTCTAN 60  
GGTNTTGTAG ACACGTGTGA CTGTNTANGT GTATTGATGT GAATANTATT AAATATCCTA 120  
ATTATNTAAT TCATTGTATT GTTCTGNGA AGTTGGGN 158

15 SEQ ID NO:5730  
SEQUENCE LENGTH:106  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
20 CLONE:HUMGS06803  
SEQUENCE DESCRIPTION:  
GATCCATANA AGAGCTCCTA AAGAAGAACC CACATGAAAA ACTATCAGAA TCATGTTTAA 60  
GCTAAACCCA TATNCAAAGA CCAANCNACG NACCACCATT CTTCGN 106

25 SEQ ID NO:5731  
SEQUENCE LENGTH:105  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
30 CLONE:HUMGS06804  
SEQUENCE DESCRIPTION:  
GATCCTGGTG TGTGTATTAT ATAAAGAGAC CCCTCCCTT ATTTGTGTT TTCCATCCCT 60  
CTCCCTTAAC AGGATTGAAA TAAACATGC TTCTGTTTT GTAAA 105

35 SEQ ID NO:5732  
SEQUENCE LENGTH:243  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
40 CLONE:HUMGS06805  
SEQUENCE DESCRIPTION:  
GATCANCAAA ATCCAATTC ACATGTGGCA CTAGGAAAAT GGAATGCTAT AAAATTAATC 60  
CCCATCACCC AAGTAGGGAT GCTGGTGCTT TTATACTGAG TCTTTACTGC CAATAAGTGA 120  
TGCTGGCTGC AAAGGANCAG CTCTACAGAA AGTTTTTGGG TTAGTGTTTC CCTAGCTTAT 180  
TNCTGCANTG GGGAAAGCCA GTTTCATACC AAAAANGANA ATGNAGGTGN TTATANTGGN 240  
NNN 243

50 SEQ ID NO:5733  
SEQUENCE LENGTH:194

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06806

SEQUENCE DESCRIPTION:

GATCTCGGTC ACGTGTCCTG GCGCTGAGG GAAAAGGAAG CGGGCATGAT TGAGACAAT 60  
 GAGGGGGTTC TCTTGATGTA ATGAAATGCA ATTTTATGGT TTGGTGCAA AACTCCTATT 120  
 TTCCAGTAAA TTAACCTTAT TTCTAAAGCA TATTTTGATT TGCCATCAAG AGCAATAAAG 180  
 CATTAAATCT TAAA 194

SEQ ID NO:5734

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06807

SEQUENCE DESCRIPTION:

GATCTGGGCC CTGAAGTATA TAAGTAGGAA TTTGCAAGAT GGATGAGGTA GAAAANNNGTA 60  
 TTTTCATATTG TGGAAATAAC AGAGGGAAGA GCCATTTGTC TTATCCCCAA CTCCAGAACT 120  
 CTACTACTCA TGGAGTCTGA CACAAACAAT GTTAATAATC TGTTTNGATT CTCATNATAG 180  
 GGCCTGGAN TTGGCTGTAA ANTNCAAANC ACNTNN 216

SEQ ID NO:5735

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06808

SEQUENCE DESCRIPTION:

GATCTTCTAG TTNCTGTGTT GTTTAGACTC AAAGAATCAC AAATNTGTCA GTAACATGTA 60  
 GTTGTTTAGT TATAATTCAG AGTGACAGA ATGGTAAAN TNCCAATCAG TCAAAGAGG 120  
 TCAATGANTT ANN 133

SEQ ID NO:5736

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06809

SEQUENCE DESCRIPTION:

GATCTTAGCA CCCAACTCTG CTGCCCTTNC TGCTGGGCAG TGCTNTCCT AAGAGGGGAC 60  
 TCCCTAAAGG CCAGAGAGAG GGTGCTATC TCCAGGACCT AGGCCACCTG TCAGCACAAA 120  
 CAGAACTTAT TCCAGACATA AACATGAGTC TTCTTATTC AAACACTGGA GCAACTGNTC 180  
 AAATATCACT CTCCTACTTA CAGGNTCAN CATACTNGTC ACAGCCCTTT ACTCCCNCTA 240  
 CATATTNCC ACANCACANT GGGGCTCANT NNCCN 275

SEQ ID NO:5737

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06810

SEQUENCE DESCRIPTION:

5 GATCATGCTA GTNACTTCCT GCGCCAGGC ACCGTGCCAA ANACTGGATG CCCCCTACTC 60  
 CTCAGGGGAC TGTCCAGGGC GCCCAGTGGT AGTGAGGGAG AGTGTCTCTG TTCTTTTGCT 120  
 CAGCCTGCTG GGCCCTTTGT GTTTGAGGAT GCTTAATGAT TCCAGCCTCT CACTGTGCCT 180  
 TATGCATTAA AATTNCTTTG TTACGAGCAA A 211

10

SEQ ID NO:5738

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS06811

SEQUENCE DESCRIPTION:

GATCTNCTTT ATAGCCANCT CTCCTCACTT AACAGGTACT TTCTCCAAAA ACCTAAGAAC 60  
 CAAAGTCTTC CGCTTGCAAC TTGGGATGGT GATATGGCTG TGTCCCACC CAAATCTCAT 120  
 CTNCACCTGN NNN 133

20

SEQ ID NO:5739

SEQUENCE LENGTH:169

SEQUENCE TYPE:nucleic acid

25

TOPOLOGY:linear

CLONE:HUMGS06812

SEQUENCE DESCRIPTION:

GATCATCGCA AGGAAGNAGG CAGACAAGAG TAAGGCACAC CTGACTCTTA GGAAGCAG 60  
 TCAGAACCAG GAGGAAAGNT TTTATTGCTA TGCGGGTAGG TAAGAACAGA TTTTACTTAC 120  
 ATCCATATAG TTAATTAAAG TCCAGTTTTT TGTTAAACNN NNTTCTNN 169

30

SEQ ID NO:5740

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

35

TOPOLOGY:linear

CLONE:HUMGS06813

SEQUENCE DESCRIPTION:

GATCTCTTGT CCACTAAGTA TCTTGTTAAA TGCCAGTATC TCAGTCTTTC TGAAGCCCTG 60  
 AAATGGTAAT TGTAGCATTT CAGAAAAATNT CTTTCATTTT AATCAATAAA AAGCTTTTGT 120  
 AAATAAA 127

40

SEQ ID NO:5741

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

45

TOPOLOGY:linear

CLONE:HUMGS06815

SEQUENCE DESCRIPTION:

50 GATCTTCCAG ATTAGGCTAA ATGTAATGAA AACCTCTTAG GATTATCTGT GGAGCATCAG 60

55

TTTGGGAAGA ATTATTGAAT TATCTTGCAA GAAAAAAGT ATGTCTCACT TTTTGTTAAT 120  
 GTTGCTGCCT CATTGACCTG GGNAAAATGN AACAAACAN TAAGGCAANT GGTAGGAAA 179

SEQ ID NO:5742

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06816

SEQUENCE DESCRIPTION:

GATCAGCCCT NCCCTTCAGC ATCCTCAGNT CCTGNAGCAG AGCCTGGAAG ACACCCTAAT 60  
 GTGGCAGCTG TCTCAAACCT CCAAAAGCCC TGAGTTTCAA GTATCCTTGN TAACACGGNC 120  
 ATGACCACTT NCCCGTGGG CCATGGCAAT TTNACACAA GCCTGAAAAG ATGTTGTNTC 180  
 TTNTGTTTTT TTCTTN 196

SEQ ID NO:5743

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06817

SEQUENCE DESCRIPTION:

GATCCGCAGT CCTAACAGGG TGAGAAAGCA CAAGAGGGGC CAGCTCGGCT GAGGCCTGAG 60  
 GAGAAATAAT GAGAAGTTTT GTTTCGTTCT TGGGCTGGGG CATCTCAGGA ACAGTGAGGG 120  
 CAACAAGCTG TCCCTCAGGG ACCCTCACCT GCCCTCCCAT GTGACCAGGC CCTTCCCAGG 180  
 TGGGGACTGG GGCCTGCTTT ATTAAGTGAG CTCTTGGGCT TTTGAAGTAG GACAGAGGGC 240  
 CCTGCTTTGG CAGAGAGGAG GCAAGGGAGG GCTTTAGAAC ATCTGAGAAA TGTTAATAAA 300  
 ATANTTCAGA AANTAGGAAA AAAATN 326

SEQ ID NO:5744

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06818

SEQUENCE DESCRIPTION:

GATCTCGAAC CCTGTCTAGA AGGAATNTAT TGTTGCTAA ATGTTCACTT TTTATAGTNA 60  
 TGTCTGTAT TCTAACAGT AAAGGGGNTT TATTNCTATC ACAA 105

SEQ ID NO:5745

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06819

SEQUENCE DESCRIPTION:

GATCTCAGAA GTTTTAAAA ATAGCAAAGA AGACTGNATT TGGAAANCAT GGTCTACAAT 60  
 TGGNTGTAA ATNCTGAAGC TATGAAGAAT AAATATTTCA ACTTTGGATT ATGAAACCCC 120  
 ATTTATGATT TTTTAAATAC ACTTGAAATA AAAATGATTA AACTAAA 167

SEQ ID NO:5746

SEQUENCE LENGTH:258

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06820

SEQUENCE DESCRIPTION:

GATCTNTAGA ATTNTTATTG TAATTTTCCT ACTTCITTGA TAAAAGAAAA ATAAGTCAGA 60  
 TTGTAACTC CAAGATTGAA AAAAAAACT CTGAAAGAN GATTATNAGT TGTAACNAAT 120  
 TTGGGGGGTC TGGGCACAGA CATCTAACCT GGTATTGTAA GGCAGAGGCT CCCATTGGAN 180  
 TGGTAGTGGT CCGGGTCAGT TGTTCATGGT GTAAGCTTG CACNGTGTAT TGAACATTNG 240  
 NAGGNTCTGN CTNGAAAN 258

SEQ ID NO:5747

SEQUENCE LENGTH:350

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06821

SEQUENCE DESCRIPTION:

GATCCCTGCC CTNTCAAGA CTTTAGCTNT TCCTTCCATC CGGTGGCCTA TTCCAGGAAT 60  
 TCCTCTTTTG CTAAATCAG TTGGAGTTTG TNTCTGTTGC TTGTAATCAA GCCTTTATGG 120  
 CTGCTGGGCT GAGTGACACA AGCACTTTAA TGGCCTGGAG GGACTTTTAA TCAGTGAAGA 180  
 TGCAATCAGA CAAGTGTTTT NGAAAGAGCA CCCTCGNGAA GGGTGGATGA CAGGGCAGGG 240  
 CAGGAAGGNC AGGNAGATGG CAGAACGGTG GTGGCTGCAG CCGGGGGTNC AACCAGGANA 300  
 CTGTTGGCA AGCTNGGGGC TAGGGGGTAA GGNNTTTTNA GGGGTNGAAN 350

SEQ ID NO:5748

SEQUENCE LENGTH:331

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06823

SEQUENCE DESCRIPTION:

GATCTTCCAT GTTTTGACGT TTGCAGTCAC ACACAACACC TTAGTTCCTC TAGGGGCTGT 60  
 ACAGTATTGT GGCATCAGAT AATGCCACCA AAGGAGACAT ATCACTGCTG CTGGGACTTG 120  
 AACAAAGACA TTTATATGGG TTTATTTTCA TTCTGCCAAA GTAAANCANT ACATCAACAN 180  
 GAGGAAACTC AGNTTTAACC TGTTATTCT ATGANNNTGG GATGATTGCT TTGTTTATGC 240  
 ACTTTTCCT GNCGTGTCAT CCGCCTGTNA GTGTTTTGCC CTNTAGTCCC TCACTAGCCA 300  
 TGCTTNTGTG NTGGGTTATC ANGGGNGTNN N 331

SEQ ID NO:5749

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06824

SEQUENCE DESCRIPTION:

GATCGAGGAT ATTTTAAAG AGGTTCAAGC TTGTGACTGT TAGTAGTGCA AGGATTGTGA 60  
 TGGGCTCAGT GATTACAAAC AAAGACATGC AAANTACAAC TGTTAAACA TTTCAAGGT 120  
 ATTTTAAAG GTTTGTATT GAAACANTGT TTATATTNC TGAGTCCTA AAAATGGTAG 180  
 ANTACACATG ANANCTTTG TTTAGGAAAN GTTANCTTGT TAANTNCTNT TGATTN 236

SEQ ID NO:5750

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06825

SEQUENCE DESCRIPTION:

GATCCCACTT TGCTCCTGA CAACACTCAT TACACTAAAC ACCTCTTGGA TTGGTGAAA 60

SEQ ID NO:5751

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06826

SEQUENCE DESCRIPTION:

GATCACTGGA TGGATAGCTC AGCCTGGGGC ATTTAGTGT TTCCCTGGTG ATAAATCCCC 60

AAGGCAGCTG GATTGGAGC TGGTGGCAAG TTGAAATNAT TAAAAATTGA TTGTGTGGG 120

ACTGTCAAA 129

SEQ ID NO:5752

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06827

SEQUENCE DESCRIPTION:

GATCTTTGGA CTGAGAATGT TTGGTAACAT AGTCAAGCAT TTGTTAAGCC AAGTGTTGAA 60

ATGTTCACTT TTTAACTTTA CAGTTTTTTT AATGAGCAAT TCTACATTTC TAAGAAAAAA 120

GATACTTCAT TTTATATAA GGTACAACT GCTTTATAA NCTGTATTCA CAATGTCAAA 180

SEQ ID NO:5753

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06828

SEQUENCE DESCRIPTION:

GATCTGGCCT TTTCTTAAAC AAATCNGTGC AAAANATGCA GGTGGATGTC CCTAGGTCTG 60

TTTTCAAAGA ACTTTTCCA AGTNCCTGTT TTATTTATTA AGTGTCTACC NNGTAAATN 119

SEQ ID NO:5754

SEQUENCE LENGTH:67

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06829

SEQUENCE DESCRIPTION:

5 GATCTCCATA AATNACTTAG TCTTCTATGT ATAGCTATCA AGGAAATAAA ACCAATTTTG 60  
CCACAAA 67

SEQ ID NO:5755

SEQUENCE LENGTH:323

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06830

SEQUENCE DESCRIPTION:

15 GATCAGAACA AAAACACCAC TCTTTAATGG GTCTTTTTCT TGGCTAGAAG TCTTTCCTCA 60  
GTTTTTGTG ACTATCATACT GCTGATTTGT GGGTNATGGA AGGGGGCTAG AGATAACGTT 120  
TCTCTGTACT TTGGTAAAGN ATGAAGGAGT CAGAGAGGGA ACAGAAAAAG TGAGAGAGTG 180  
GCCTGCTGAA ATAATAGCCT GCCTCTAAAA GTTGTGACCA GAAAGTATGA TTCATTGGG 240  
20 CCCAGNGGGN GTAANNTATG TTTTNCATN TACCTCCCAT AGNACANGGT GTTNGGAGGG 300  
NNGGAGTGAG TGTNNTAGAN GGN 323

SEQ ID NO:5756

SEQUENCE LENGTH:274

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06831

SEQUENCE DESCRIPTION:

30 GATCAGGTGT CTATAACATT TTAAATTCTC TCTGGAAACA GACTCAGGTT TCTTTGGACC 60  
AAATCCAAAA GAACACATAG CTGTAACACA GCTGTAGTTG ACTAGAATGC TCTGTATACT 120  
TTATATTTAA AANTGCTTTG CATTTCTNCC AGTGCAATGA ANTTTCATATG GTGTCCCACC 180  
TTATTTAATG ATGGTACANT TTAATACTT AGTCAACTGC TGTNGAAAGT TTTCTCTATG 240  
ANAGTNANGC TGTTTGAAGA ATTNANGNGN TTNN 274

35 SEQ ID NO:5757

SEQUENCE LENGTH:344

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS06832

SEQUENCE DESCRIPTION:

45 GATCCGCCCA CCTCGGCCTC CCAAAGTGCT GGGATTACAG GTGTGAGCCA CTGAGCCCAG 60  
NCTGTATCCA TGTNTTCTGC ATGTTGATTC AACCAGCTAC ACATGGACAT TGTAGTTAGG 120  
CCTATGATGA TTGTGTCTGT TCTGAAGATG TACATACCTT TTCTTCTATC ATTATTCCCT 180  
AAACANTAGA GTATAACAAC TATTTACACA GCATTTACAT TGTATTGGGT NTTNTANGTA 240  
ATCTAAAGAT GGTTTAAAGN ATNCAAGAGG GTATGCATAG GNTATATGCG AATACCACCT 300  
CATTTTANAT NGNTGACTTG NGCNTCGANN ATGAGGGGAT NTGN 344

50 SEQ ID NO:5758

55

SEQUENCE LENGTH:329

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06833

SEQUENCE DESCRIPTION:

GATCATGATA CAATTATTTT ATTAAGTCAT GGTAAATAAC AAATGAATCC AGACTTGTCT 60  
 AACAGATTTT CCATCAACAA ATATTGTTAT GTGCAAAAAGT ATTGCCTATG TTGTTTTACA 120  
 CACCACTGCA TTAAC TAGAA CTGCTGAGAG GACTGTATAT ATGATTTTAA ACCTAAGTTG 180  
 ATTTTTTTC TCACTCTTGA AAGGAGTACT TCTTTGTGAA AGCAGTTCTT ACAGCTTTGT 240  
 TTTCAACCAG CTA AAAATGT TTTGTATATN ACTCTAACCT GTTGCCTCC ACATTCTGTT 300  
 GGTNCTGATT GNTGCTGTNT NCTGGTTN 329

SEQ ID NO:5759

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06834

SEQUENCE DESCRIPTION:

GATCTATCCC TGCGGCCTCC ACACCTGAAC TTGCCTAACT AACTGGCAGG GGAGACAGGA 60  
 GCCTAGCGGA NCCAGCCTGG GAGCCCAGAG GGTGGCAAGA ACAGTGGGCG TTGGGAGCCT 120  
 AGCTNCTGCC ACATGGAGCC CCCTCTGNCG GTCGGGCAGC CAGCAGAGGG TNNGTAGCCA 180  
 AGNTGNTTGT NCTGGGGGCT GNCCNTGTGT ATTCACCACC AGGTAAATTA GACCATTNN 239

SEQ ID NO:5760

SEQUENCE LENGTH:143

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06835

SEQUENCE DESCRIPTION:

GATCAACTTT CCTTCTGTGT GTGGCTCAGN AGTTCTTCTG CAGAGATGGC GCTATCTTTC 60  
 CTCCTCCTGT GATGTCCTGC TCCCAACCAT TTGTACTCTT CATTACAAAA GAAATAAAAA 120  
 TATTAACGTT CACTATGCTG AAA 143

SEQ ID NO:5761

SEQUENCE LENGTH:52

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06836

SEQUENCE DESCRIPTION:

GATCGCATCC CACAATGCGA GAATAATAAA ATAAAATTGG ATATTGAGA AA 52

SEQ ID NO:5762

SEQUENCE LENGTH:359

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear



CLONE:HUMGS06837

## SEQUENCE DESCRIPTION:

5 GATCCTCCCG TNCAGCCTC CTGAGTAGCT GGGATTACAG GCGCACACCA CCAATGCCCA 60  
 GCTAGTTTT GTNTTTTNA TAGAGACGGG GTCTGCCAT GTCATTGAGG TTGGTCTTGA 120  
 ACTCCTGGGC TCAAGCAGTC TGCCTGCCTT GGNITCCAG TGCTGGGATT ACAGGCGTGA 180  
 GCACCGTGCC CGGCTAAAA GTATTTTNA GTTCTGCATA TNGCTTATTT CACTTAACAC 240  
 TATATTAGAG NTTGTTTAT ANCANTACAT ATAGATATGC TTATCCTTGN TTGACAGTNG 300  
 10 CATAATTNTT CCANTAAAA TTGGTTGTAT CNAGGGGCAN TTAACCCAGT TACTTAGNN 359

SEQ ID NO:5763

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS06838

## SEQUENCE DESCRIPTION:

20 GATCATNAAG GACATTCGCA ATCTGGAGGA CATCAGGAAG ACCTTACCAT CTGGCTGCTT 60  
 CAACACCCCG TCCATTGAAA AGCCCTAGTC TCITTAGGGC TGGAAAGCAG CATCCCTCTG 120  
 ACAGGGGGGC AGTTGTGAGG CCACAGAGTG CCTTGACACA AAGATTACAT TTTTCAGACC 180  
 CCCACTCCTC TGCTGCTGTC CATCACTGTC CTTTTTNAAC CAGGAAAAGT CACAGAGTTT 240  
 AAAGAGANGC AAATTAANCA TCCTGANTCG GGNACANAGG GTTTTATCTA ANANNNGGTN 300  
 GNNNGTGN 308

25 SEQ ID NO:5764

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS06839

## SEQUENCE DESCRIPTION:

35 GATCATAAAT ATTAATAATN AAAACTGAGA AACTATTAC AATGCATTCC TTATAAATAA 60  
 ATGCTACATT TAGTAACTCA TTTCACCCAA A 91

SEQ ID NO:5765

SEQUENCE LENGTH:320

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS06840

## SEQUENCE DESCRIPTION:

45 GATCAGCACA AGTAACAGAA AATNAGCCTG ACGGTGGCTT AAGCAATGGG AATGTTTATC 60  
 TCACATAGCA AAAAGTCTGT AAATAGATGG TTCTAGAGTT GGGTGGAAAGC CAAAATGTCA 120  
 TCAGGATTTC CTGGGAACCG TCTGCTTTGC CATCCTCAGT ATTGCAGAAAT GGCTGCTCCT 180  
 GCGCCAAGCA TCATTCTGCA AATNATGGTG TCCACAGCCA GAGTGGACAG TAGTACAGGN 240  
 GCCTTCTCAT TCTGCCCTTA TCCGGGANTA ACCGTCAGCN GCTCCAGCAA CCTNCCCCT 300  
 GTCTNTTTAT AGNGTGGGNN 320

50 SEQ ID NO:5766

55

SEQUENCE LENGTH:320

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06841

SEQUENCE DESCRIPTION:

GATCCCACTC TGATTGCATC CATTTCCTG AAAGACTTGT TTGTNCTGCT TCTCTTCATA 60  
 TAACTGAGCT GGCCTTATCC TTGGCATCCC CCTAAACAAA CAAGAGGTGA CCACCTTATT 120  
 GTGAGGTTCC ATCCAGCCAA GTTATGTGG CCTATTGTCT CAGGACTCTC ATCACTCAGA 180  
 AGNCTGCCTC TGATTTACCC TACAGCTTCA GGGCCAGCTG CCCCCAGTC TTTGGGTGGT 240  
 GCTGTTCTTT TCTGGTGGAT TTAATGCTGA CTCACTGGTA CAAACAGCTG TTGANGCTCA 300  
 GAGCTGGAGG TGAGCTTCNN 320

SEQ ID NO:5767

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06842

SEQUENCE DESCRIPTION:

GATCCAGTGA CAATNTGCC CCTGCCAGCC TGNGTGTCTG CACTCATCAT TCATTCATCC 60  
 ATNCTAGAGC CAGGTCTCTG CNTCCAGAC GCGGCGGGNG CAATGCTCCT N 111

SEQ ID NO:5768

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06843

SEQUENCE DESCRIPTION:

GATCATTCTC TCTGAGGGCA GNTGNGGCGC AGGNAAATAG TCTTGGNAAT GTTAAATATG 60  
 ATGGGTAAAT TAAAAGTTT ACAACATTCT ACCTAATATT TTNCTTTTAA CATACTTTT 120  
 CTGTTCTATT GTATTATGGT GTCCGAAAGC TAAATAACGN CTAGGNAAAA TTTTTTTAAA 180  
 AAAAGNAAAA TCAGTTTAAT GTGGGNAGTA CTTAAGTGGT ATTATATTN NCATTTTCAC 240  
 GTATAGTGCA TANAGN 256

SEQ ID NO:5769

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06844

SEQUENCE DESCRIPTION:

GATCGTGTTC ACAGAGGACT TCTTTAAAGT GTCACATTTT TAAATGTAA ACATATTTT 60  
 AATGCATACT TAAGTAATAT TTAAGAACT AAACAAAATA ATGATACANT TGCAGTGTG 120  
 TGCTTGTTGT CAATGACAAA AATAAAACCA TTTTGGTGGT AAA 163

SEQ ID NO:5770

SEQUENCE LENGTH:253

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06845

SEQUENCE DESCRIPTION:

GATCTCCAAG AAGTGACTCT AGCAGAAGAT TTTATGGTGA TAAGCATNCC AATCANGAAA 60  
 TGA AACAGT GTTCTGAGT GCACACTGAC ATGTCTGTGA ATATGTTACT GAACCTATAG 120  
 TCCAGTTTTT TNATNTCTTG TTTTAGTCTG AAATNATTG GGGCCTAATA ATCCTAAAAN 180  
 GAATGGAGCT GCATTGATGA ATTGGCTCAG TATTTAANGG GAGCAAACCT NTNGATAATA 240  
 NNTCTTTTNA GGN 253

SEQ ID NO:5771

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06846

SEQUENCE DESCRIPTION:

GATCTGAAAT ACTGACAGNG TTCCCAAAG TTAGATATTA ACACAGCTTT TNACNTCTCT 60  
 TATGAGAACT TTA CTGTAAA TATACCTTTA TCATAGAAAT GAGATATCCA ATACCTNATG 120  
 GNGACTACAA AAAGGNN 137

SEQ ID NO:5772

SEQUENCE LENGTH:371

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06848

SEQUENCE DESCRIPTION:

GATCCAGAG TTCAGCCAGC CTGGGGTCCA GAACTCAAGA GTCCGCCTGC TTGGAGCTGG 60  
 ACCCAGCGGC CCANAGTCTA GCCAGCTTGG CTCCAATAGG AGCTCAGTGG CCCTAAGNAG 120  
 ATGGGCCTGG GGTGGGGGCT TATNAGTTGG TGCTAGAGCC AGGGCCATCT GGACTATGCT 180  
 CCATCCCAAG GGCCAAAGGT CAGGGGCCGG GTCCACTCTT TCCCTAGGCT GAGCACCTCT 240  
 AGGCCCTCTA GGTGGGGAA GNAACTGGA ACCCATGGCA ATAATAGGAG GGTGTCCAGG 300  
 CTTGGGNCCT TNCCTGGTN CTCCNAGTGT TTTGNTNGGG TAATAANTTG GANCTATGGG 360  
 CTCTNAATTG N 371

SEQ ID NO:5773

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06850

SEQUENCE DESCRIPTION:

GATCGCACAC TACGCTCCAG CCTAGGTGAC AGAGTGAGAC TCCATCTCAA CAACAACAAC 60  
 AACAAAAAAC CACAAAAACT ATATTTTAA TCATGTTTGG TAGCTTGAAA ANTAAATNCT 120  
 TTCTGCCTAA A 131

SEQ ID NO:5774

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06851

SEQUENCE DESCRIPTION:

GATCTGGAAG ANCTGCTGAC AGAGTGGCCA GACACAATAC CACTGTCTTT GGCTCTGGGG 60  
 NCAGTTGGCA TGCCAGGCCT GACTGCCTAC TTTGGCCTAC TTNAATCTG TGGTGTNAAG 120  
 GGTGGAGAAA CAGTGATGGT TAATGCAGCA GCTGGAGCTG TGGGCTCAGT CGTGGGGCAG 180  
 ATTGCAAAGC TCAAGGNCCTG CAAAGTTNTT GGNGCAGTAG GGTCTNNTGN AAAGGNTGCC 240  
 TACCTTNAAG AGGN 254

SEQ ID NO:5775

SEQUENCE LENGTH:346

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06852

SEQUENCE DESCRIPTION:

GATCCTGGTG CTATGGTTTG AATGTCCCCA CCAAACTCA TGTGAAATT GAATTGCCAT 60  
 TGTTTAAGAG TATAAGGGGT GACTGGGCCA TGTGAGTCT GCTCTCATGA ATGGATTAAT 120  
 GCCATTGTCA TGGAGTAGGT TAGTTTTCTC TGGCGTGGGC TCCTGGCAA AGGATGAGTT 180  
 CTGCTGCCAT GCTGTCTGTN TCATGCACCT GCTCACCATG TGAGCCTTCT GCNTCACACA 240  
 GGATGACCT CACCAGATAC TTGCACCATG CTCTNGGGAC TTTCCCAAGT NTCCAGAGCN 300  
 GTGAGCCAAA TNAAGTNGCT NTNCTTTATA AAANANAAAN ANAGTN 346

SEQ ID NO:5776

SEQUENCE LENGTH:336

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06854

SEQUENCE DESCRIPTION:

GATCCAGGGT GNCTAAAGAA TAGAAGTAGA GTTCCACCCA GGGCCAGAGG GAACAATCTG 60  
 GGATTCAGAC ACAGCAGTGG TGCCAACGTG AATCTACCTC GTNCTAGAGT CTGAGTAGCC 120  
 TAGTCTATCA CCCAACACAG ATAAGACTGG ACAGGGGCTC CCAGGAACCA ACATCTAAGN 180  
 GGGGAGTTTG GAGAGGGGCT AAAAGAAAGC AGGTAAAGCC CCAANTGTAA CTGATTGATG 240  
 ACCAGGGATA ACTATTACT AGTGCTTTT TGGNTTATT GTAACTCTGT NACTTTCCCA 300  
 GTATTGTGNA ATNTTNNNC TTCTGNNCT CCTGTN 336

SEQ ID NO:5777

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06855

SEQUENCE DESCRIPTION:

GATCTATTTA GGTGGAATA GTTGTGGATG TACTAAGAGT AATGAAATAA AATTATAGCT 60  
 TCAA 65

SEQ ID NO:5778

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06856

SEQUENCE DESCRIPTION:

GATCTTGNGA CGAACTGAGC CACGAGCGTG GCTTTAAGGG CCGTCCGAAC GCTGCAGGCC 60  
GGCCAGGTCC CTGGGCGTCC AGGCCTGGCC TACGCACCAC TTTNTCCCTT AGCGTTTAAA 120  
GGNNNNN 127

SEQ ID NO:5779

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06857

SEQUENCE DESCRIPTION:

GATCCTATGT GAAAAGAAAA GTGAAGCAAC TGAATCTTCA GCATGTNCTC ATCGGCGGAC 60  
CTTCTTGTTG AATGTAACT GTGCCATGTT ATTAATAAAT GTGAATAAG CTTCCAAA 118

SEQ ID NO:5780

SEQUENCE LENGTH:259

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06858

SEQUENCE DESCRIPTION:

GATCTAGTAT AAACCTCACT TTACTCTTTT GGAATAAAGT GATTGGNTAG GACCCCATTG 60  
CCAGGAATAA GANTCAATAT GCTGCTGAGA AGGAACCCAT GGTGTTGANG ATGTTGAAAA 120  
GACANCACAG TCAGTAACGT GGAGAAATGG CCTGGNTTCA ANTCTTGGCT CTGACACTTG 180  
GTAGGTATGA GACCTTGGAG ANGTTTCTGN NCCTCTCCAT GCTTCATTTT TNTGANGGTT 240  
TATTGTGTGG TTAAANTTN 259

SEQ ID NO:5781

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06859

SEQUENCE DESCRIPTION:

GATCCTNAGC GGAGGTTAAG ATATTAAGTN ATTTCCCAT TGAATCAGAA TTATATTGAT 60  
TCTGTGCAAT CAAAACAAAA GGCAGANTAG AATGCTGAGA TTGGTTAAGT TTGCAATNAC 120  
CATCTTGAAC CACAGATTTC TNCTATGTGT CATCAAAACA TCTAGTNNNG N 171

SEQ ID NO:5782

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06863

SEQUENCE DESCRIPTION:

5 GATCCTCAGA CCCTGCACAG CCCTGANTGG CTTACATCT NTTGGTCAGT GTCTTCATTC 60  
TCCCCAGTCA GGGACCTNGG ATGTTTGTTA CTNCCAGAAG CCCTTNTCTA CCCN 114

SEQ ID NO:5783

SEQUENCE LENGTH:55

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06864

SEQUENCE DESCRIPTION:

15 GATCACACTG TGAAGATACA CAGAGTCAAT AAATGTGCAC TGTAATGGAC TAAAA 55

SEQ ID NO:5784

SEQUENCE LENGTH:298

SEQUENCE TYPE:nucleic acid

20 TOPOLOGY:linear

CLONE:HUMGS06865

SEQUENCE DESCRIPTION:

25 GATCCTGGAG AGCTCCCAGA CTTTGCTCAG CGTTCTCANG AGGNAAGCTG GGAACCTGAC 60  
CAAGGCTACA GCCCCAGACC AGAAAAGTAG CGGCGGCAGG GACAGCTGAC CAGACCACGG 120  
GCAGGGCCTG CNTCCNTNTG CCCCTCAGCT CAGCCCCAGC AAGTGTGTGC TCAGAGCATC 180  
TTTGTTCCTC ACGGTAGCAG CTACCTTCCC TCACTGTCTC AGGTGCCGAG AGGGGCAGGT 240  
GCCAGCCTNC ACTGGCATCA NTGACAAGNC CANGGCANGN NCCACCNGNG GGGTCCTN 298

30 SEQ ID NO:5785

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS06866

SEQUENCE DESCRIPTION:

GATCAATTGA TTGTTTAAAC ATGGAATTTT GAGAAATATT TGGGTAGAAA AAAAAGTAGT 60  
TTTAAAAGAN GAGAATCCAA CCATTAAAC ATCAAAANNT GANATTNTTT GTAAATN 117

40 SEQ ID NO:5786

SEQUENCE LENGTH:358

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

45 CLONE:HUMGS06869

SEQUENCE DESCRIPTION:

50 GATCAGCATG TGGACTGCAC TGTTTACTTT TGGTTGGACT GGGACAATTT GGGGAATATC 60  
TACTATGTTT ATTCTTCAAG AACCCATCAT CCCATTAGAT GGAGAAACCT GGAGTTATCT 120  
CATTGCTATA TGTGTCTGTC TCACTGCAGC ATTCTTAGGA GTTTATTATG CCTTGGNCAA 180  
ATCCATCCA GCTTTGGTTA GCACAGTACA ACATTGGAG ATTGTGGTAG CTATGGTCTT 240

55

GCAGCTTCTN GTGCTGCACA TATTCCTAG CATCTATGAT GTTTTGGAG GGGTAATCAT 300  
TATGATTAGT GTTTTNTCC TTGCTGGCTA TAACTTTAC TGGAGGAATT TAAGAAGN 358

5 SEQ ID NO:5787

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10 CLONE:HUMGS06870

SEQUENCE DESCRIPTION:

GATCTATGGG TAATTTTAAA TTTGCTGT CAAGCTTAAN AGGGACTTGA CAACAGCTAG 60  
GATNGAAATN ATTTCAACAC TTAATATGC TTACTTTGTG CCGGACGCTG TTCTAAGNCT 120  
TTNACAAN 128

15 SEQ ID NO:5788

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

20 TOPOLOGY:linear

CLONE:HUMGS06871

SEQUENCE DESCRIPTION:

GATCCACCTA CCTTGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCAC AGTGCCCGGC 60  
CTGTATTGG TGATATTTA AAAAATTCTA CTTTGACCTT AAGTGCTTCA AGAATTGTGT 120  
25 TCAGTTAGTA GTCCTNTTGG TAAGACTAAC TTTCATATGC TATCTTTGCT CCATGAGCTA 180  
TCATAGTGCT GTTTTCTTTC ATTACCCGTA AGAGTGGCTC TATCAGCA TTTACTGTTA 240  
AGGGCTACAG TTAGACCTCT TGTTAACTCT ACTTNATTT GTGATGGCTG TGTTCACAC 300  
TACCTTGATT TATAAATGTA NGTAATGTNG TTAATNGN 339

30 SEQ ID NO:5789

SEQUENCE LENGTH:343

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS06872

SEQUENCE DESCRIPTION:

GATCCTNTGT ATAACATCGG GGCCTTGCTC AGGGGCTGTT GCGTGGTTGC CCTGCATTGC 60  
CTCCGNCGCA CCGCCTCCG TATCAAAACC TAAATAGAAG TTGTTGTTAC CGTGTGCCAA 120  
TGTGTCCCAT GTGGTTGTG CCAGGTAGAG AACAGGAAG TCAATCATCT GTNACAGTCT 180  
40 CTATTCTGTC GTTTTGTCC TTGGTATTN ATTGCACTA TATTNAGGTG AAGCCTGTTT 240  
ACTGTTTAAA NCCGGAGTNT TCTCAAANG GCATGGNGAC CTGGTTCCAG TAAATGTCCC 300  
ANCAGTGGGG GTTTTAGAAN GCATNNTTCA NTGACCNTNG NAN 343

45 SEQ ID NO:5790

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50 CLONE:HUMGS06873

SEQUENCE DESCRIPTION:

GATCATTATG TAGTTTCTGG ATTAACAAAAA TTTGTGTGTG AAGTTGCTTT GTAAAGTGCA 60  
 TGTGGAATTA ATGGGACAGT GTGCCCTTTG TGTTAGATGT TAGAGCAAAA GAAAGGGCTT 120  
 ATAGTGTTAG TATTGGAGCA CTTTGAAGAT AGATATTTNC AGAAAAGATG TAGGATTTAA 180  
 NAGTTAAATT TTAANTTTTA GAANANGATA TGATGGCAAT TGGNAATAGT CACAATGNNG 240  
 TTCTTCATCC AGTNGGTGTT TAACCAGTGT TNATTTTGCC NCTGGTAATG TGGTNACCTG 300  
 TGNGTGNTTT CCANTAGATG NGTTATGGGN 330

SEQ ID NO:5791  
 SEQUENCE LENGTH:265  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06874

SEQUENCE DESCRIPTION:  
 GATCACCACA AAGTCTGGCT CAGTGACTAT GGCTTTGCAA AACTAAACA TTCCTGTCTC 60  
 AAGTCCTGTA GATGGCTTGA AATAGTATAC ATAAGCATGC CTTATAACA TCTTCAGTCT 120  
 TTATCAACTC TTTGGAGATT CAGCCATTCT TTTTGTACT TTAGGGAATT AAATCANNNN 180  
 ATAATGTATA AATCTGAGCA TGGCCGATGG CAGAAGANAT TTTGTCATAC GTTTTAAAG 240  
 ANNTAAGANT GTATTATGTT TAAA 265

SEQ ID NO:5792  
 SEQUENCE LENGTH:191  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06875

SEQUENCE DESCRIPTION:  
 GATCAGAAAC CCTCATTTAA TATAGATTAT TTTGAAATN AAAAAATTG TAACAAGGTG 60  
 GCTTCTTAC CCACCTAAA ATGTAAATAA AACATGCAAG CTTGAGTGC TCGAGTTCTA 120  
 TAGTGTACC TAAATCGTAT GTGTATGATA CATAAGGTTA TGTATGCCCT GTAGCCGTTN 180  
 NNNNNNTNT N 191

SEQ ID NO:5793  
 SEQUENCE LENGTH:204  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06876

SEQUENCE DESCRIPTION:  
 GATCTTGTCT TTATCTACTT TCTTCAGTAA ACTCTGGAAG AAAAAACTT CCTGGAAGTT 60  
 TGGGCAATCA TTTGCCATTA TTTNCCTTTC CTTGAATTTC TTGATATCAT GAATACTGCT 120  
 GTAGTATGGG ACATTATGTA TTTNGGTAAG CAGACTTCTC TNCTGTATTT GTNTTTNGTT 180  
 AAACAGAATG ACAAGTTCCT TAAA 204

SEQ ID NO:5794  
 SEQUENCE LENGTH:237  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear



CLONE:HUMGS06878

SEQUENCE DESCRIPTION:

5 GATCCCAACC CAGGCCTTGC CCCTGCCCTC CCACGAATGG TTAATATATA TGTAGATATA 60  
 TATTTNAGCA GTGACATTCC CAGAGAGCCC CAGAGCTCTC AAGCTCCTTN NTGTCAGGNT 120  
 GGGGGGTCA GCCTGTCCTG TCACCTCTNA GGTGCCTGCT GGCATNCTCT CCCNCATGCT 180  
 TACTAATACA TNCCTTCCC CATAGCCATC AAAACTGGAC CAACTGGNCN NTTCTN 237

SEQ ID NO:5795

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06879

15 SEQUENCE DESCRIPTION:

GATCAAAAGC CAAGCTCTGT CCCCGTCAGC ACGTCACCCT CCTCACTGT AATCCCTGAC 60  
 TGTTTTCTCT AAATGAAGAA TTATTTAGAG AATATAANTT AGAAGGGCCG CCACGTCAGA 120  
 TTTCCTGAN TGGGAGCAGT CTTTCCAGCC TCGAAAAATG TTAAANCAAT ATGCAGATGA 180  
 20 CCTAGCACAA ATAANGANTG CTAGCAACCG CAAA 214

SEQ ID NO:5796

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06880

SEQUENCE DESCRIPTION:

30 GATCAAGTGA TACTAGGAAT ATAGGTACAA GTAAGACTGT CATTNCATT GTTTTCTCTT 60  
 TGGACTGATT CTTTNCATTA TAACAGCGTT GTGAAGTAGA GGTGGGATTA GGAACNTCT 120  
 GCTGTAAATCA ACTCCCTNGC TGCCCAACA CCAGCCTNAT ACACAACACC ANCAGGTCCN 180  
 GCNTNGN 187

SEQ ID NO:5797

SEQUENCE LENGTH:247

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06882

SEQUENCE DESCRIPTION:

40 GATCTTNAG TGCTTTGGGG ATGGGGTGGG CTGGGGTGGA TGGATGGGCA ACAGTQACTT 60  
 TAATTACCT TGCTGCTCTG CATTNCCAG TTTATNCTTT TGTTCCTTT ATCTGACTGA 120  
 CTCTGTCAAA CAAGTGTCAA AGTTGTGTGT TAAAAATGT TTAACAAAA ANNTGTTGTA 180  
 ATGACACAAA GCCTTATGAN ANTNTTATG GAGTTCAATA AAAGANGTAA GAGGTCAANC 240  
 45 CNNAGGN 247

SEQ ID NO:5798

SEQUENCE LENGTH:106

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06883

SEQUENCE DESCRIPTION:

GATCTTCCCA ATATGAACAA ATATACTATG TATATNGTGT GTATTCTAG AAATCAATGG 60  
 CAGCTGCTGA TGGNGTTGTA ATTAGAANTC TATATAGNNT ATAGAN 106

SEQ ID NO:5799

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06884

SEQUENCE DESCRIPTION:

GATCAGGACC TACGTTAAGG TGGATTTTNA ATTATTTAAA ATTCTGATT TGTTTTATTT 60  
 TTAATTAATC TTTGGGGGAA GGATGGGAGG GGGGTGAGGG TTGAAGAAGT AAACATTGTA 120  
 CCTATTGGAT ACAATGTTTA ATATTTGTGT GATGGGCACA CTGGAAGCCC AAACCTCACT 180  
 ATTACACAGT ACATTCATGT AACAAGCCTG CAAA 214

SEQ ID NO:5800

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06885

SEQUENCE DESCRIPTION:

GATCCTTAAT GGTGGCCAGA GCTACCATGC AGTGCAAAAA TAAATTAAGT GAAAATGTAT 60  
 TATTGAGATT AACAGTGCAA GGCCAATACA TTTATAAAT CTGTCAGTAT CTTTTTAAA 119

SEQ ID NO:5801

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06886

SEQUENCE DESCRIPTION:

GATCCTCAGT GAAGTGCATT CGGAATGAGG ATGGAACCTG GTTAACACCA AATGAATTTG 60  
 AAGTCGAAGG AAAAGGAAGG AACGCAAGA ACTGGAAACG GAATATACGT TGTGAAGGAA 120  
 CGACCCTAGG AGAGCTGCTN AAGAGTGGAC TTTTGCTCTG TCCTCCAAGA NTAANTCTCA 180  
 AGAGAGAGTT AAATAGCAAG TGAATTTCTA CTACCCTCTC AGTCACCATG TTGCAGACTT 240  
 TCCCTGTCTG GAGGCTCACC TTAGAGCTTC TGAAGTTTCC AAGCTCTGAG GTCAACCTNC 300  
 ACATTTTGGG CAATGGCATC TTCAAAAACA ATTAATTTN 339

SEQ ID NO:5802

SEQUENCE LENGTH:381

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06888

SEQUENCE DESCRIPTION:

GATCTCCAAG CGAACTCAGC CTCCTCCCAA GCTCCTGTG GGTCTAGCC ACAAGCTCTC 60

5 CAACAATTAC TATTGCACTC GCGATGGCCG NCGGGAATCT GTGCCCCCTT GCATCATCAT 120  
 GTCGTGCGAG AAGGCGCTGG TGTCAGGCAA GCCAGCAGAG AGCTCTGCTG TAGCTGCCAC 180  
 TGAGAAGAAG GCGGTGACTC CAGCTCCTNC CATAAAGAGG TGGGAGCTGT CCTCGGACCA 240  
 GCCTTACCTG TGACATTNCA CCNTNACGNC CACCCGNCTA CTTTGCCTN CTTTGGATTT 300  
 NCTTCAGGGN GAATNTTGAC CTAATTGTAT GACAATTAC GTAGGGGCTC AGGTATTAC 360  
 TTCTGAGGTN TTACTTTTGG N 381

10 SEQ ID NO:5803  
 SEQUENCE LENGTH:150  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06889  
 15 SEQUENCE DESCRIPTION:  
 GATCTACACA TGTTGCCTTG CATTGTGGT AATCTACACC AATGGAAACA TGTACTACAG 60  
 CTATATTGA TTATGIATGG ATATATTGA AATAGTATAC ATTGTCTTGA TGTTTTCTCT 120  
 GTAATGTAAG TAACTATTT ATATCACAAA 150

20 SEQ ID NO:5804  
 SEQUENCE LENGTH:276  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS06890  
 SEQUENCE DESCRIPTION:  
 GATCCTAAGC AAAATCGGAG ACTTGAACAA AGTTGTTC TGGCTGTNTG CCCTTCATT 60  
 TTCTGTTCTC TTCCTTCTCC CTGGAGATGA NAGAACACAG AATCANATTN CCAACCTCTC 120  
 TCTCCNATGN ACTCTCTCAT CCCCAGCCC AGCCACATTT ACACATAGGG CAGACACATC 180  
 30 TCACACAAGG GAAGTACCCC TAAAGACCTC ACATAAATAA AACTAGCAA ANTTCAAGTT 240  
 GNNTCTTGGC AAANGTAGTN NTGGGTATGT NAGTCN 276

35 SEQ ID NO:5805  
 SEQUENCE LENGTH:219  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06891  
 SEQUENCE DESCRIPTION:  
 40 GATCANGTTC NGGGCTCTNT CAGCCGCCAC CTCTGGGAAA GAGAAAAGNT TTGGGTCCAC 60  
 TGAACATCAT GTTTGTAGAC GCTGACAGGT GGGTCCTAA TNAGAGCCAA CACATGCTCA 120  
 CTGCCAGCNC CTGCCCTGAG TACTGGGAAG TTTCTCCTGG AAGCCCTTGT GAGATGGCTC 180  
 NGNNGGCTGG TATCCCGACT TGGGAAGATGA GGAACTNN 219

45 SEQ ID NO:5806  
 SEQUENCE LENGTH:191  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 50 CLONE:HUMGS06893

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## SEQUENCE DESCRIPTION:

GATCAGTTTT NTGCTGAAGG CACCTACTCA GTATCTTTTC CTCCTTATCA CTCTGCATTG 60  
 GTGAATTTAN TCCTCTCCTT TGTGTTCAAC TTTTGTNTGC TTTTAAAAATC AGCTTTATTC 120  
 TAAGCAAATC TGTGTCTACT TTAAAAAACT GGAAATGGAA AAAAAATTAA ATCTNNGCCA 180  
 GGTCTTCAA A 191

SEQ ID NO:5807

SEQUENCE LENGTH:206

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06894

## SEQUENCE DESCRIPTION:

GATCTGCAGC TTCGCGGGGA CAGAGATGTA ACCCAACTCG TTCACGGATG TNCCGCGCGC 60  
 CGTGTACCG GCTGCGGGCC AGGGGTACTC GGAAGGCGCG GGCAGGAGCC TNGCGAGGAT 120  
 GCACCTTCCC CTGCNTTGA AAGGTAGAAC TGGGGAGTGC GGGAGGNTGA AGGTGGCCCG 180  
 GAAAAGAACA CCTNTTCGA ACCAAA 206

SEQ ID NO:5808

SEQUENCE LENGTH:55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06895

## SEQUENCE DESCRIPTION:

GATCTAAATA TGTATTTCAT AATNTTCCCA TAATAAATTA TATAAGGTGG CTAAA 55

SEQ ID NO:5809

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06896

## SEQUENCE DESCRIPTION:

GATCTGGTTT NATTCCTGTA ATTCAGCCAC CTGATTTGCT TGAGGGGGNG GNATANTATG 60  
 TGGGTTTTTG TACAAACATG TTTCTCAGTG TGTGTTATT TTGGAAAAAA TGAGGGGAGG 120  
 GAGTTTTGCA AGAATGNGAG AAAATGANTG AAGAAGGCCT AATCNTCTCT CTTTTTCCAG 180  
 TGGATTNAAT GGGNCCN 197

SEQ ID NO:5810

SEQUENCE LENGTH:344

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06897

## SEQUENCE DESCRIPTION:

GATCCAATGA TTTAATTTT GGGGAAGAAA ATCCAGTGAT TAAAGTCATG CAAGGAGATG 60  
 GCCTGGGGCT TGCTAAAAGT CAGGTTGCAG TTTCCATTGC ATTCAAGAAA ATCAGAAAAA 120  
 TAAATACAAC TTTTAGAAGA AACTGAGTTT TCTCCCATTC ATGTTTAGCT ATTGGGGGGT 180

CTCATACTTC TGGACTTGCT TAGACCTATG CTATCTAATA TGGTNGCCTC TGCCCATCCA 240  
 TATGTGGCCA CTGGGAACT TGGAAATGTN ACTAGTTTGG AATTAAGGTG TGCTNGTAAC 300  
 TAAATNCAC CCTGNGGTNT CAAAGGCTNN AATAAANGNA NGGN 344

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SEQ ID NO:5811

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS06898

SEQUENCE DESCRIPTION:

GATCTATCTC CCTGTTAGGT GTNCTTTTTC TCCTCTTTAG AAAGNAGCCA AGGNAACCAG 60  
 GGTTCCTCA AAGTGGAAAA TACTGGAAC NATGTACTGN TATCATAATG N 111

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SEQ ID NO:5812

SEQUENCE LENGTH:169

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS06899

SEQUENCE DESCRIPTION:

GATCCATTGC TTTTAGACAG GACTGGGTTT TGCTGTCCAA TGATATACAN TAATAGTNCT 60  
 TCTTACAGCT AAGCTGGCCC CAGCCTTGTC TTGATATTAA TACATGAANT NTTTATAATT 120  
 GTCTCATTGT CTCATTAGA AACATCCANA TNTNCTGCT GTGNCTATN 169

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SEQ ID NO:5813

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS06900

SEQUENCE DESCRIPTION:

GATCAGTAAC TTTATCTCTA TCCTTAATGA ACATTTGTTT TATTGGTGGC TGGAAATATT 60  
 TCTATTGTAT TTCTGTGTAT ATNNTNAATA AAATAATTTT TGGCCTCTNA AA 112

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SEQ ID NO:5814

SEQUENCE LENGTH:271

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS06901

SEQUENCE DESCRIPTION:

GATCAGCAGC TCGGAAGACT CAGATGCCGA AAATCGTCC TCCCGAGAGC TGGATGACAG 60  
 CAGCAGTGAG TCCAGTGACC TCCANCTGGA AGGCCCCANC ACCCTCAGGG TCCTTTGACG 120  
 AGAACCTTGC TGACCCCAA GCAGNAGACA GACCTCTGGT TTNNTTTGAC CTCAAGATNG 180  
 ACAATGAAAG TGGGTTCTCC TGGGGCTACC NNNACCCNTT TCTAATTTAG TCTCTNGAGT 240  
 CCCAAAAAGA AGTNCAGGCA GAGCCATCTN N 271

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SEQ ID NO:5815

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SEQUENCE LENGTH:317

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06902

SEQUENCE DESCRIPTION:

GATCATGAAA AGAAAAATNA ATGGCAGGAA AAAAGTTTGG TCCTTAATAT ACTTTGGCCT 60  
 AGTNAATAA TGTGCTTTT TGGTGTGTTT TGTTCATCAC TACAAGATAA AAAGGAAACA 120  
 TTACANCTCA AGGCTTTAAA AAGTTCATTT ATTGAAAATC ATATGTATAG CCTAGCATAAC 180  
 GAATGTGCAG TTTTAAACAC ATAGCTTCAA GCCATTTCTG NAAGCATNCA CCGGGNGCTC 240  
 TGCTCAGNTA GAGTCAGNCT CCNNGCTCCA GNCCGACTGC GTGCGGGGGA CCAGCGGCCG 300  
 CGTTNNATGG NGGGNCN 317

SEQ ID NO:5816

SEQUENCE LENGTH:294

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06903

SEQUENCE DESCRIPTION:

GATCTAGGAG AGGCGGCTCT GAACGAGTAC CTGCGGGTCA AGACAGTGAC CTTGATTAC 60  
 TGAAGAAAAG TCTTTNTGAG AAGAAAGTCC CTGCCCCTCC CTCGTGGCTG GGGTCCCCTC 120  
 CCTCTTGAGC CTNGGTGCAC AGCANCTCCC ACCTGGGGGG CTAGTGGAAG CCCTCCTGCC 180  
 TGCACACCAT GTCTGCATCT TGGACGNCCT CTGTCCAGTC AGAAGCAGCC CTTGGNTNNG 240  
 GGTGAGNTGT GNCCCTTCCA GGGGGAATAA AGCTTCTGAA GAGAGACCGT CAAA 294

SEQ ID NO:5817

SEQUENCE LENGTH:263

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06904

SEQUENCE DESCRIPTION:

GATCAAAATC AATGGGAAGG TGCTGCCAAG GTGTCCTAAG CTTCTAGGAT AATATTMATN 60  
 CTCTCAGGGT TTTGGAAC TGCCCAAAG TCATAGTTCT CAGTCCTGGG TGTGAGTCAG 120  
 ANTACCTGT GGAGCCTGGC AAACCTTACA GACACCCTGG CTCCAGCCCT GGAGATTTTN 180  
 ATTTANTGGA AATATCACTT AGAATTCTAT TGTAAGCAAT AAAAGTNTAT TCTCACTAAA 240  
 CTTTCAAAAA NTNGNGTGN NNN 263

SEQ ID NO:5818

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06906

SEQUENCE DESCRIPTION:

GATCTTTCCC NTTTGGATGT GCGTGTGTGT CTGCNTGTGC CATGTGCGTG GCACGCATAT 60  
 GAAGTGTGTG TGCGTGTGAA CGGCTTTGGG TCCTGTGTGT TTTNCTGTGA GCTNCAGTGT 120  
 TCTGTGGGTC TGTGGTATCT NACACTGTGG NCATTAATGT ACTTCTTGGG CATTTTAATA 180

AATTTTNNAA CAGTTCAAA

199

SEQ ID NO:5819

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06909

SEQUENCE DESCRIPTION:

GATCANAAAA CCTAAANTCC ATAGGNACCC NAAATCCTCA CAGTTACAGA GACACCAAGA 60  
 AGANTCTGGA CAAATAGGAC TTGCTAAGGC CTCCACAGTT TATN 104

SEQ ID NO:5820

SEQUENCE LENGTH:343

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06910

SEQUENCE DESCRIPTION:

GATCGAACGG ACTNTAAATC CGCTCTTTAT CGAAAGCTAA GCAAGCTGTG GCTTTTTTCC 60  
 AACTCCGTGT AACGATTCTA AGTGTAGTGT NGTAGGACCC CGACGGGTNT GGCAGCAACT 120  
 GCCCTGGAGC CCCAGCCCTT GCTTCCATCT NTNCTGTGCG CCCACAGTA GACGTGCAGA 180  
 CGTCCCTAAG AAGGTTCTTN AAGATGTTTA TTTTATATAG TCCTNTTTTA CTGGAAGACG 240  
 TACGNATACT CCATCGATGT TGTATTTGGN GGGGGGTGNG GAATTCTTGT ACGCAGTTTT 300  
 CNTTNNGCTT TACGAAGCCG GTNAANNACG CGTTTTGAAN TAN 343

SEQ ID NO:5821

SEQUENCE LENGTH:106

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06911

SEQUENCE DESCRIPTION:

GATCACTTGA GCCCAGGAGT TCAAGACCAG CCTGGGCAAC ATGGCTAATN AACACTAAGC 60  
 ATAGTTTAA TGTCTTTNAT ATTAAAGACT TTCTCAAATT CTAAA 106

SEQ ID NO:5822

SEQUENCE LENGTH:350

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06912

SEQUENCE DESCRIPTION:

GATCCATTCC AGCCACTCGG GGCTGACAGC GGCACCCCGT TCCAAAGTAA AAAGGGGTTT 60  
 GGGGACCCGT TTAGTGAAA AGACCCATTT GTCCCTCCT CTGCAGCTAA ACCTTCTAAG 120  
 GCCTCTGCCT CGGGCTTTGC AGACTTCACC TCTGTAAGTT GAGTCCTCCG NCTCCGGGCC 180  
 ACCCCACTCC CTTCGGCTTG CAGCTTCCTT GGGATTTTNG TNCCTTTTA AAGGCAAACC 240  
 TCCCAGCTTC TTTAGCCTCT TGGTACCTNA CACTCTCTGT CCNTCGCGTT ATTNATTCTA 300  
 CACTGCCACT TCTGTAAGAA AAACAGTTTN TCAATAAAAA AAANAGNTGN 350

SEQ ID NO:5823

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06913

SEQUENCE DESCRIPTION:

GATCTCGTCT CTAAATAAAA TATACAAAAG AGTATTGGGA GGGGGTATGA AGAATGTATA 60  
GGGCAATAAT TGAAATCTGT TGAAGCTGGG TACACAAAAG TNCATTATGT TGTTCCTCTA 120  
CATTATATC TATTNTNAGT NNITTNATAT CTATTTTNAN TTN 163

SEQ ID NO:5824

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06915

SEQUENCE DESCRIPTION:

GATCAGTGGT TTCCATTGTC AGGACTGGGC ATGGGGAAGT NTGGCTGTAC AAGAGGAGCC 60  
CAAGGGAACCT CCTTGGTGGT GATGGAACCTG CTCTGTATCT CAAATGTCTG TATCTTTAGA 120  
AAGAANTCTA CATATGTNAT AACACTGCAT AGAAATATAT ACATGTACAC ACAAGTGAAA 180

SEQ ID NO:5825

SEQUENCE LENGTH:247

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06916

SEQUENCE DESCRIPTION:

GATCAGTGAA ATCCTAGGGT GCTCTATGAG ATTGTACTAG GCCTATNAAG AGTGGTAAGC 60  
CAAAATAGGTC TCCATGGGAG ATACATTATG TAAATAAATA AACAAATGGTT TGCTGGTTCC 120  
TGTTGGTGTG TCCACAAGTA GGTAANCATG TTTAAAGGAA CCCGGGTTCT TAGATTTTNT 180  
NAGACTTTTT AANCTCAAGG CTGNGCATAA GTNCTTGAAN ATAAANTGCT AATNCTTAAG 240  
TGTCAAA 247

SEQ ID NO:5826

SEQUENCE LENGTH:169

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06917

SEQUENCE DESCRIPTION:

GATCAAGAAT TGCAAAAATG GAAAAAATTA ATGAAAAGGC ATCTGATAAA TGTGGACGGC 60  
TCCAAATCAT GTCCTTAGAA AATCTTTCTA TTGAAAAGGA GACTAAATTG TAATGTGATT 120  
CACAATGTAA CAATATAANN CTNNGTTTTT NTATAATTNT NTAANAGTN 169

SEQ ID NO:5827

SEQUENCE LENGTH:268



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06919

SEQUENCE DESCRIPTION:

GATCACCTCC GGGCACAGGA TGCAGGAAC TGTGACATT CAGGGATGTG ACCATAGAAT 60  
 TCTNTCTGGA GGAGTGGGAG TTTCTNAACC CTGCTCAGCA GAGTTTGTAT AGGAAAGTNA 120  
 TGCTAGAGAA CTACAGAAAC CTGGTCTCTN TGGGTCTTAC TGTTTCTAAG CCAGAACTGA 180  
 TTAGCCGTCT GGAGCAAAGA CAGGAGCCCT GGAATGTGAA GAGACATGAG ACCATAGCCT 240  
 GGGCGACAGA GCGAGACTCC GTNTCAAA 268

SEQ ID NO:5828

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06920

SEQUENCE DESCRIPTION:

GATCTGTGCC CAGAGACGGG ACTGGGAGGG CCCACTTCAG GGTTCCTC TCCTCTTAA 60  
 GGCCGAAGAA GGGTCCTTCC CTCTCCCAA GACTTNGTGT CCTTCCCTC CACTCCTTCC 120  
 TGCCACCTGC TGCTGCTGCT GCTGCTAATC TTCANGGCA CTNCTGCTG NCTTTAAGTC 180  
 GCTGAGGGAA AAATAAATGA CAAATTGCTT GNGNCCAAA 219

SEQ ID NO:5829

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06922

SEQUENCE DESCRIPTION:

GATCATAAGT NCTTCTATCT GCTGAGCTTT ATTTATTNAT TTTGGACAGA AAGTTTGGTG 60  
 GGAAGTTGC AATAAAATCA GAATCTCTCT TGTNTGAATT ATGCAGTTTA ACCCTGTCCA 120  
 TGGNNNGGCT GTACTCTATT CTNACTGTAT TTN 153

SEQ ID NO:5830

SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06923

SEQUENCE DESCRIPTION:

GATCTTGTTT TNATTAATA TGCCAGTTTG TATTNCCTG CCTTGGGATT TTTTGTGTC 60  
 CGCTGTACAG TATTCTAAGG GAAAAAGAAA AAGAAAGATG TGTAAGTAA CAGAGAGAGG 120  
 TGCTATGGT GTAGAGACCT CTTTCTAATA AAGAAATGAA AATATGTCTA AA 172

SEQ ID NO:5831

SEQUENCE LENGTH:96

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06927

SEQUENCE DESCRIPTION:

GATCCCAGGG AAGACGTCTC TCTCNGCATC CCAAGCCATN CAGCCCTTAT CGCTGTACCC 60  
AGTAAACCCT CAATAATAT CTTTNCAGC CAGAAA 96

SEQ ID NO:5832

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06928

SEQUENCE DESCRIPTION:

GATCACTGTA TTAATTTTGG TTTATCTTGG CATATATNGT TCAGTTTGTN TTTATTTTGA 60  
ATTTTNCCTT TTTTCCGAT TAGGCTTTGG TCAGCATTTT NCATTTAAAG AAAAGTAACA 120  
CTCCCATCCA CTCATAAGCT TGGTACAAAA ACTTCTCTGG CAGTTACTTT TGAAGCTTCA 180  
CTCTGCTTTC TGTATAAAGG GCAGTCTGTG GTCACGCAAG ACTTTAAA 228

SEQ ID NO:5833

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06929

SEQUENCE DESCRIPTION:

GATCTTTCCTG CTTTCGAAGG TATANTGTAT CTATTTCTGT CAGGAATNAT ATTTCCAAAT 60  
GAAAATGTAA AGAACATTGG GAAATAATAA ACTTTCCTTT CAAAGTAAA 109

SEQ ID NO:5834

SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06930

SEQUENCE DESCRIPTION:

GATCTGTGTT TGGAAAGAAA AGAAGGAAAC TAAGACGTGC GAGGGNAAGA AAAAGGAAAA 60  
CCTAATTAAA AAATATGTAT CCTCTATAAT NAGTTATNAC AGCCATTTGT AATGAATTG 120  
TCGCAAAGAC GTAATAAAAT TAACTGGTAG CACGGNCAAA 160

SEQ ID NO:5835

SEQUENCE LENGTH:77

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06931

SEQUENCE DESCRIPTION:

GATCGACCGG CACCGCTGTT GCCTCGTAAG CCATAGCGCA TGC GCGCTCT CAGAATAAAC 60  
AGGCCCTGCC TGGGAAA 77

SEQ ID NO:5836

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06932

SEQUENCE DESCRIPTION:

GATCANATAA CAGAATGCAC CAGTCATCAG CTATTCAGTT GGTAAGCTTC CAGGAAAAAG 60

GACAGGCAGA AAGAGTTTNA NACCTGAATA GCTCCCANAT TTCAGTCTTT TCCTGTTTTT 120

GTAACTTTG GGTTAAA 137

SEQ ID NO:5837

SEQUENCE LENGTH:402

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06933

SEQUENCE DESCRIPTION:

GATCCAGCTT CATTCAACAT TACTACCAGT TATTTGATAA TNATAGAACC CAACTAGGCG 60

CAATTTACAT TGACGCGTCA TGCCTTACGT GGGAAAGGACA ACAGTTCCAG GGGAAAGCTG 120

CCATTGTGGA GAAGTTGTCT AGCCTTCCGT TCCAGAAAAT TCAGCACAGC ATCACCAGCG 180

AGGACCATCA GCCCACTCCA GATAGCTGCA TCATCAGCAT GGTGTGCGG CAGCTTANGG 240

CGGNTGAAGA CCCCATCATG GGNNTNCGCC AGATGTTCTT ATTAAGAAGC ATCAACGATG 300

NTTGGGTTTG CACCAATGNC ATGCTTCAGG CTCGTCCTGC NCANNTTTGG CTGNCCTNCT 360

TTGCAGNTTG GGNACTNANG NTGTTTGCTT GCTGCCTTTT GN 402

SEQ ID NO:5838

SEQUENCE LENGTH:261

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06934

SEQUENCE DESCRIPTION:

GATCTTCGTA ACGGCCTCGG CACGCTCCAC ACCCCTGGAG TCTCCCGAGG CCCCCATGTG 60

CTGCTGAGTG GCCAAGATGA TGCCAGGCTG CCCTATACAC TGGGGGATTC TGCCCTGGCC 120

CATGCACACC CGTCTTTCCA TGATGGCAGA GACATCCAGT NAGGACCTGA CCCGTCTCTG 180

TCTGAGGCCG GCTCAGCAGT GCAGCCTGGT CCCTGGGGGC TGGACCCAGG CTCCTAAATA 240

AACCAGCAAC TNCCTCGNAA A 261

SEQ ID NO:5839

SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06935

SEQUENCE DESCRIPTION:

GATCTCGGCT CACTGCAACC TCTGCCTCCC GAGTCCTGGT TCAAACATTT CTCCTGCCTC 60

ANTCTCCTGA GTAGCTGGGA CTACAGNNAC GAGCCACCAC ACCCTNCCCC CGMATCCCTT 120

GCCTCCATCC TAGTAAAGAC TCCTTGCTAT GCTGCAAA 158

SEQ ID NO:5840  
 SEQUENCE LENGTH:127  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06936  
 SEQUENCE DESCRIPTION:  
 GATCAGTTTT GCCAAGGGGC CAGAATTATT CCTTGTTAGA ATTGCTCCAG TTCAAGTCTG 60  
 CTGCTTTCCT ACAGTTTTTC AAATTTTATA ATGTATTAAA TACAATAAAC TCTGTTTAAA 120  
 AAATAAAA 127

SEQ ID NO:5841  
 SEQUENCE LENGTH:232  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06937  
 SEQUENCE DESCRIPTION:  
 GATCAAAGAA AATTTATCTC TTTTATAAA CTTAAGGACA GTTGCAAAAG GCTTCAAGGA 60  
 ATTTATCTCA ACATTATTCT TTCTATGTCC TAACTAAATT CCTCAACTGT NATGANTTTT 120  
 CCANCTACTT CTTGAACAGT GGTCTATNCT GCTACATGAN GATGAATACA AACAANNNTN 180  
 TTGTATAACC TACTATNCCA GTNCTCCTGT GTCAGTCTTG CCTATGGATN TN 232

SEQ ID NO:5842  
 SEQUENCE LENGTH:290  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06938  
 SEQUENCE DESCRIPTION:  
 GATCTCCAGN GCGCAGTGGG TTGGAGGAAG TACTACGTGA CAGCTGGGGG AGCCTAGCCC 60  
 TTGTNTGGGN ACTCACACAT CCACTCTAAC CCTTCTNACC ACAGGTCCGG CCGCCCCATT 120  
 AGCTTCATNG TGGTTTTCAT CACCCCAAC CCCCTGAGCA AGATTTCCTG GGTCAACAGG 180  
 TTACATTTGG CCANAATCGG ACTCCGTGAG TATAGCCCCA GGGAGAGTGC CTNAGGGGGC 240  
 AGNNGTGTGG AACGNAGG TTNNGGTGA GTNNGGTAC AGAATGTNGN 290

SEQ ID NO:5843  
 SEQUENCE LENGTH:198  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06939  
 SEQUENCE DESCRIPTION:  
 GATCTTGTGA CATTCTTCT CCTGGACAAT NAGTCTCAGG AGCTCCTCAC CAAGCACCTT 60  
 GTTACCCCA CCCCTGCCA CAAGAGAAAA CGCACGTAA CTGTAATTN TCCACTACCT 120  
 ACCCAAATCC TATAAACTG CCCACCCA TCTCCTTTG CTGACTCCAG GTGATTAAAN 180  
 AACTATTGCT CAGGGAAA 198

SEQ ID NO:5844

SEQUENCE LENGTH:255

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06941

SEQUENCE DESCRIPTION:

GATCTTTTT CTAACACATA TTGAACTGA ATAACAGACT TAAAGAAAGC CTTTGTTTAC 60  
 ATTGCTATTT ACTNTTGTGT TTGGGGGAAA ATACGAGGGA TTGATTTTAA ATAAAAAACA 120  
 TTCCNTCTTT CATTNAATAT CAGTATCAAA AGAGGNGAC AAACATCTAT CTTTCTCATC 180  
 TNTATTNAAG TNCCTTTTGT TANTGTAGTA TCAANGTTTT TTAGGTGNTG CAAGGTTTAA 240  
 CAANTCATT GTGGN 255

SEQ ID NO:5845

SEQUENCE LENGTH:318

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06942

SEQUENCE DESCRIPTION:

GATCCCTCAG AAGACTTAAC TTGGCTGGAG TGGGAGGAAC TGAAATACC ACTCCATGGT 60  
 ATACCCATAT ATCCAAATCG TAGAGAACGA GAAGCTATGA TTTTATCATC TTATGCTGGA 120  
 ATCTTAATGA ACAGTATCCC GATTGAGGAA GTCTTTAAAA TTTATGGGGC TGATTCTNCT 180  
 GNCGATTCTG GTACCATCAA GTTCCCCGA GTTCATCTN TCCGNCCTC CTTNCACCNC 240  
 TTTGCCATG TTAGCAGNAN CNANAGCAGC AGCATACGGC CGCAAACNGG GTGTCNAGTC 300  
 AAGNANGGTT GCAGCAGN 318

SEQ ID NO:5846

SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06943

SEQUENCE DESCRIPTION:

GATCGGAGGT TGGGTTCTG ATTAAACTTC ACTGTGTGTT TTCTATNTCG GAAA 54

SEQ ID NO:5847

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06945

SEQUENCE DESCRIPTION:

GATCAGAGAN TTACCACCCC TGCTTNGAAG CAGTGTGGT GTATTCCCAC TAAATAAAC 60  
 CAACTGGTAT AACATTCCCT GGAGCTTAAT AAGCACTCAA TAAATATTG TNGANTAAAN 120  
 ANAGAAAN 127

SEQ ID NO:5848

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06946

SEQUENCE DESCRIPTION:

5 GATCTGCAGA TTCCAAATGG GAATAAGCTC TATCATATTC TGAAACAAGA ATTAGAATGN 60  
 CITGAGAACG GGCAAATAAC AAAGCAAACC AATATAATTA TATGGTCATT CTGACCCCAG 120  
 CTCTTATACA NNTTATACAT GTATTTTGT GTATGTTGT GAGAGTTGTA TGTATGTGAA 180  
 TGNGTGTGAG TGTGTATTCA CATAACATA TN 212

10

SEQ ID NO:5849

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS06947

SEQUENCE DESCRIPTION:

20 GATCATAAGG TGAAGTCCCA CAATAGGCCG TCTGCAAGCT GAGAAGCAGN GNAAGCCAGT 60  
 CTGAGTCCCA AAACCCTAAC AGTAATCCTT TNCTAACGTC AGGNTGCGTA TCGACCTGTG 120  
 TGTGCACATT TGCTGTGCAG AGTGTGCACT GCTGAGGAGA ATGGTGCCCA AGAAGGGCAC 180  
 TGTITGNCCC AAANTTTNC AANTAANCAT TGN 213

25

SEQ ID NO:5850

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06948

SEQUENCE DESCRIPTION:

30 GATCATCTTG AATTACTGTG GGATGTANGT TTCAAAATTT TCAAATAAAG CCTTTGCAAG 60  
 ATAAA 65

35

SEQ ID NO:5851

SEQUENCE LENGTH:55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06949

SEQUENCE DESCRIPTION:

40 GATCACATAC TGCAGTCCAG CCTAGGCAAC GGNGCAAGAC GTCATCTCAA GGAAA 55

40

SEQ ID NO:5852

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

45

CLONE:HUMGS06951

SEQUENCE DESCRIPTION:

50 GATCTCCCA AATCCATTGN TNTCACCAGG CCCTCCAGA ACCTCCTCAG TTCCTTCACA 60  
 GTGCAACCCT NTGTACTTGG CCCGCAACCC ANTAGTATTG TGCCTCACTT CACCTTCCAT 120  
 GGGCAACTGC CCTCCCTTCT GGACATAAAA CCTNATATNT TAAATAAAGT TGAANTATGN 180

55

NAAGAN

186

SEQ ID NO:5853

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06952

SEQUENCE DESCRIPTION:

GATCAACTGA AAAAAGCATG ACTTTTGAAA TCTCTGAATG CCTTGGTTCT NAGTATTATC 60  
 ATNCTTNATT GAATTATTT CTNATTAAAN TATGTAGTTT TN 102

SEQ ID NO:5854

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06953

SEQUENCE DESCRIPTION:

GATCATGTGG AGTGAAAGGC AAATCTTACT GCTTAATGTA TAACTCTCA CCACAGGAAG 60  
 CATCGCTGTT TCCAATAAAT ATTGCTGAAG ACAGAAA 97

SEQ ID NO:5855

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06954

SEQUENCE DESCRIPTION:

GATCTGTCCA GTTTGTGTAT GAAATGGATT TGATAAAGTT TTTGCTAGTT ATTTACTACA 60  
 TTTTGGGATT AATAAGTGAT TTANATGCAT ATNTTCCTGT AAATCTACAG TTTTGTGAC 120  
 AAGATATTCT ACAAGTNATG ANGCTAAGGG AAGAAAATGC CAAAGATACC TCTAGTTATG 180  
 TTGANCACAG CCAGCACAGT TTCGACAGGT CAAGGAAGAG CTGTTTCAGT AAAGANTGAN 240  
 GTGAAAACNC TTATTTNGGA AANTGTTTCT CANTANTAAN CTGTATAGTT GTTTCCTTNA 300  
 NACCCCCN 308

SEQ ID NO:5856

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06955

SEQUENCE DESCRIPTION:

GATCCCAAGT GTTAGAAAA CTAAGTAAAC TTTGTTGTCA AGCAATTTGT CCATGTGGAA 60  
 AGAATTTAAA GAGAAGCTGA ACAATGGAAT AAACAAATAA AGCATGTTTT TNNATCTTC 120  
 CCATTAAA 128

SEQ ID NO:5857

SEQUENCE LENGTH:143

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06956

5 SEQUENCE DESCRIPTION:

GATCTTAAAA ACTGCAGTAT TCCCCATTT TATAATGAGA GTGTGGGGCT GGCAGGGNTT 60  
GGTTGGAGGG AGGAGAGAAG ACAGAGGAGC ACTTAAGGTG CAAAGCAGCC TATTTTCCT 120  
TCAATAAAAA TTGTTAAGGG AAA 143

10

SEQ ID NO:5858

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS06957

SEQUENCE DESCRIPTION:

20 GATCCGTGGA AATAGCCTGG CTCCCTCTTA CCCAGTAATG AGGGGCAGGG AAGGGAAGTG 60  
GGAGGCAGCC GTTTAGTCCT CCCTGCCCTG CCCACTGCCT GGATGGGGCG ATGCCACNNN 120  
GTCACTCTTC ACCCAGTCT GGCCTCTGGG TCCCACCACC NAGCCCCCG TGTNAGAACA 180  
ATCTTTGCTC TGTACAATCG GGCTCTTTAC AATAAACCT TCCTGCTTNC ACAA 235

SEQ ID NO:5859

SEQUENCE LENGTH:258

25

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06959

SEQUENCE DESCRIPTION:

30 GATCCAGTAC TATCAGAAATG ACATCCCCTA CTGAGGAGGG GACCTTCGAG GGCCTCTGCC 60  
CCATGTGCCC TCAAAGCTGT CCCACAATCA TGGAGCCCTG CNACCTNCCT GCCCTGNCGN 120  
CACATGCAAT NGAGGAGAGG CCTGTGGCCA AAGAACCTGG TAGCGGCTCC TNGGGCAGCA 180  
CGTGENTGGC GCACTTTGGT AACGCCATGG GANTGCAGCG NCCANTCGAA TGGGATNGGT 240  
GCTGTTNTAT GCACAGGN 258

35

SEQ ID NO:5860

SEQUENCE LENGTH:309

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS06960

SEQUENCE DESCRIPTION:

45 GATCAGATTA CCAGGAACAT AGGAGTGGAT TCCTGCCCCA ACCAAACCGC ATTCGTGTGG 60  
ATTTTTTAT TCAACTTAAT TGGCTATTCC AAAGATTTT TTTCCCTAT TTTAACGAT 120  
TGGAGCCCTT AAGATGCACG ATGGAATTGT GTTTTGCCTT TTTNGGNAAG NGGGAGCAAA 180  
GCGGGGNCCT GGNATAAAC GNTTGGAGCA ATCTCCTTNG GNAGGGATT CAGCANGGGG 240  
TTAGNTNGGT GAAACATTTT AAAGGGGGGA AAGGGGGGGG GTTTTTTTT NAAANTGGG 300  
TAAATNCGN 309

50

SEQ ID NO:5861

55



SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06961

SEQUENCE DESCRIPTION:

GATCATGTGG ACCAGAGCAA ANNAAGTTC AGTTTGTGTC ACAATTCATT GCCAGACTTC 60

ATTGGAATGC TTTGTTTATGAT GATGTATGTN CATTCTCAGC TTTATTTTCA GATGCTTAAC 120

TGGGCAATGA AGTCTAACTT CAGGTTGAAC TNTCTCCNGN NTAANCTCAG GCTAAATGN 179

SEQ ID NO:5862

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06963

SEQUENCE DESCRIPTION:

GATCGTGGTG GTGGGGACTG GAGACCGGAC CGAGAGGCTG CAGTCCCAGG TGCTTCAAGC 60

CATGAGGCAG CGGGGCATTG CTGTGGAAGT GCAGGACACG CCCAATGCCT GTGCCACCTT 120

CAACTTCCTG TGTATGAAG GCCGAGTAAC TGGAGCTGCT CTCATCCCTC CACCAGGAGG 180

GACTTCACTT ACATCTTTGG GCCAAGCTGC TCAATGAACC GNCAGGAAC GACCTGCTGA 240

CTGCACTCTG CCAGGCTTCC NAATTGCTTT CANTCTTATC TACCCTTTTG GGAATTATNT 300

NGGCTTATCA ACATAATAAT TTGATACAAC TNNTCCCAA A 341

SEQ ID NO:5863

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06964

SEQUENCE DESCRIPTION:

GATCTGGTGA AAATAGGATT ACATTGGAGC CAATTGAATA AATTATTCTT TTCAATCAAA 60

SEQ ID NO:5864

SEQUENCE LENGTH:359

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06965

SEQUENCE DESCRIPTION:

GATCTGGGAG GTGGAAGCCA GGCCAGAGGA CTTGGGGAAA ATAAGATGGA GGAAGGAAAA 60

AGGGAGAAGC TGAGCCACAG CTTAACTCCT ACAGAGTGAA ATNAAAACGG GCTGAAAAATA 120

CCACCCACAG AGAGGACCTC GCCCCAAGCA AGCCAGTGAG CAGCCCTGCC AGACTACTGC 180

CAGACTGAGA AACCAGAAAG CTGGTAGTCA TGTGGGCTTG CNTTCTNTGC CAAACGACTG 240

GGAAACCAAA ATNAGCCAC CTTGTGTTCT TCCTAGCTCC ACCCTCCCGG TGCTGCTGTG 300

TTCTGCTCCT TCCNCACGGT TTCCCTGCTA TAGTCCAG CTGCTTGTA CCGGGCCNN 359

SEQ ID NO:5865

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06966

SEQUENCE DESCRIPTION:

GATCATGGCT AACGGGCACA GGCTTTCTTT TTTGGGTGAT GAAAAATATTC TAAAAATAACT 60  
GTAAAAATAT TGCACAACTC TGTNAACATG TGA AACCCA CTGAACTGTA TGCTCTAACT 120  
GTATGAATTG TATGGTATTT AAATTTNACC TCAATAAAGC TGTATCAAA 170

SEQ ID NO:5866

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06967

SEQUENCE DESCRIPTION:

GATCAGAGCA AGAGAACTTC CAGAGATAAT GGATAGAATG AAAGAATATA TATCTATATA 60  
TATTTAACAT GTTGTITAGT AATCCCTATT TTAATTC AAT TCTCCATCTG TAAAAATATA 120  
GCTAACTGAA TTATTTCTGT GTTCTACTCT GGGCTCTCAC ATTA AACTC TGTTCAAAAA 180  
GTTTAAA 187

SEQ ID NO:5867

SEQUENCE LENGTH:57

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06969

SEQUENCE DESCRIPTION:

GATCTTGGAC TTCCAGCCT CCAAACTGT GAGAAATAAA CTCCTGTTGT TTGTAAA 57

SEQ ID NO:5868

SEQUENCE LENGTH:289

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06971

SEQUENCE DESCRIPTION:

GATCATGGTC AGCTCACACC CTAATAAGTC CACATCTTCT CAGTGTITTA GCTGTTTTTT 60  
TCATTAGGNT TCCTTNTATT CTGTACCTTG CAGCCATGAC CAGTTC TGGC CAGGAGCTGG 120  
AGGAGCAGGC AGTGNGTGGG AGCTCCTNTT AGGTAGANTT TAACATGACT TCTGCCCCAG 180  
CTTNATCTGT CACACANGTN TGTGGCACCN CTAGTGCTAC TGCTAGGATA TCACTTACTC 240  
AGTTAGATTT TTCCNAAAAA NTAAGCTTTT AATTNATTC TTTGGTGTM 289

SEQ ID NO:5869

SEQUENCE LENGTH:346

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06972

SEQUENCE DESCRIPTION:

GATCTCCTCT TCCACCTCTT CCTGGTTCCT TTGCGGGGAA AATTGCACTA AACAGAACC 60  
 TTTTCTTAAT CCATGTTGGA AGGAAGCAAC AGTGAAGTCT ACCTGTTCTG GAGTTCCTCT 120  
 GGGTCTGCAG AAGGTTGGGA ATTTAGAAAA TAAGGCTGTT CTTTCATATT TTAATTTAAT 180  
 CTCTGTCAAT GGCCATCCCT CCCACAAAA AACGTGGGTT AAGAGAACTT GCAGACTGGA 240  
 TATGCAAGCA AACGGGCANC TCTGGAGAAA ANTANGGNAN GGAATGCTGA CTTTCTCTTT 300  
 CTNTCTCTTT GTCCCCACAC CNNTTCCCAN CCAATTACT GGGGTN 346

SEQ ID NO:5870  
 SEQUENCE LENGTH:187  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06973

SEQUENCE DESCRIPTION:  
 GATCCCGACC CTCACCAGTC CCATTTCCTT CCCTCCAGCT CTGCTTAGGC ATTTGCCCC 60  
 TCACCCCAAT GTTCCACACC ATCGACAACC AAGGGGTGAG GTGGGGACAG GCCTCAGCAG 120  
 GGAATGGGGC GTATATGTTA GTGTGCTGC AACAATAAAG CCTGTTGCAT CTCTCATGCC 180  
 AGTGAAA 187

SEQ ID NO:5871  
 SEQUENCE LENGTH:135  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06975

SEQUENCE DESCRIPTION:  
 GATCTNGGAC TTCCAGAAAA CAGAACTGTG AAAAGNCAAG TTTCTGTNGT TTAACCACC 60  
 CAATCTGAAG TATTNGTTA TGGCAGTCCT NGGCAGACTA ATACAATATG CAACACATT 120  
 ACAATANATA TACAN 135

SEQ ID NO:5872  
 SEQUENCE LENGTH:138  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06977

SEQUENCE DESCRIPTION:  
 GATCAAAATA TGATGTTAAA TTCTTAAATC ATATTGCTA TGCAGCTGAA GATGATATT 60  
 TGATTTGTAT TTTGGGGGTA CCTGTGTTGA GTTGATAAAC ATTCCATCT TCATTAAAC 120  
 TGCTTCCAAA CTAGTAAA 138

SEQ ID NO:5873  
 SEQUENCE LENGTH:189  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS06978

SEQUENCE DESCRIPTION:  
 GATCGCGGG GCACAGTGGC TCGTGCCTGT AATCCCAGCA CTTTGGGAGG CCTAAGCAGG 60

CTGGTCGCTT GANCCCAAGA GTTCGAGACC AGCCTGGGCA ATACAGCGAG ACCCCATCTC 120  
AATTATATATT ATTTAAAAAN TAATTAATGT AAGAGNAATT AAAACAGATT TTAAANNGG 180  
NNAAANNAN 189

SEQ ID NO:5874

SEQUENCE LENGTH:98

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06979

SEQUENCE DESCRIPTION:

GATCTGACTC TTCATTNTA AGTTCCTTGT TACATCATGG TCATTTNCTA GTTTTNNACC 60  
AGACTCCCAT CTCACAATAA AATGCATCAA CAAGCAAA 98

SEQ ID NO:5875

SEQUENCE LENGTH:182

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06981

SEQUENCE DESCRIPTION:

GATCTGCCGG CTCCCGCCCA GCCTGTGTNG AAAGAAGGCC CACGGGCACT AGGGGAGCCG 60  
AATTCTACAA TCCCGCTGGG GCGNCCGGGG CGGGAGAGAA AGCTGGT6CT GCAGTGGTGG 120  
CCCTNNGGGG CCATTGATT CGCCTCAGTT GCTGCTGTAA TAAAAGTCTA CTTTTTGCTA 180  
AA 182

SEQ ID NO:5876

SEQUENCE LENGTH:87

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06982

SEQUENCE DESCRIPTION:

GATCTTGTTT TNCCTCATCT GTAAAAGNAG GTTAACAAAG CTTTCTGCC CACTTCTTGG 60  
GGAGAAGGGA ATAACATAAT TGGTAAA 87

SEQ ID NO:5877

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06983

SEQUENCE DESCRIPTION:

GATCTTTGGC AGCGCATATG GCCTCTTGG GGTATCGTC GCAATTNTTC AGACCTCCAG 60  
AGTGAAGATG GGTGACTAGA TGATATGTGT GGGTNGGGCC GNGCCTCACT TTTATNTATT 120  
GCTGGTTTTT CTGGGACAGC TGGAGCTGTG TCCTTTAGCC TTTCAGAGGC TTNGTGTTCA 180  
GGGCCCTCCC TGACTCCCC TCTTGCTGCG TGTTGATTG GAGGCACTGC AGTCCAGGNN 240  
NNGTCCTCAG TGCGGGGAGC AGGCTGCTGC TGCTGACTCT GTGCAGCTGN GCACCTGTTN 300  
NCNNCANCTG CACCN 315

SEQ ID NO:5878

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06984

SEQUENCE DESCRIPTION:

GATCTNTTTT TTTTGGTAG TTCCTCAGCT ATTCAGGAAG GTGTATTNT GCCAGTAATT 60  
 ATCCCTATGC TAATACTTTT TAAAACATTA CTAGTGAGTG CCCTAAAACA TTACTAGTGA 120  
 GTGCCCTTTT NNTTACAGA AGAAATTGA TTGTTGTGAG CGATAATAAA ATTAACGTGG 180  
 ANCTCTTAAA 190

SEQ ID NO:5879

SEQUENCE LENGTH:322

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06985

SEQUENCE DESCRIPTION:

GATCTCTATT ATNAGGCTAG ATGTATAGCC TCTACTCCCC CAGCTTCTTG CTCTTGACCC 60  
 TGCACGTGAA GTTGCCCTTC TATTAGCAGC CAAGGAAAAG GGAACATGA GCTTATCCAG 120  
 AACGGTGGCA GAGTCTCCTT GGCAATCAAC CAACGTTGCT ATGAAATATG CCTCACACTG 180  
 TATAGCTCAT TATAGGACGT CAGGTTTNTT GAAAAAAGTG GGCAAGNCAT GATTAATGAA 240  
 TCAGAATCCT GTTCATTGG TGAATTGGT GGGGGCTNTT TGAATTTAA AAANTNNTNG 300  
 TNAGNTGTAG NNNNGTGTNT NN 322

SEQ ID NO:5880

SEQUENCE LENGTH:247

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06986

SEQUENCE DESCRIPTION:

GATCATGGAA TACAAGATAA TTTCTCAGGA ATCAGATGGT CTTATTCCAC ACCTGCAGGA 60  
 ATGTCAGCAT TGCAACCACC ATGGCAAATA TTGATTAAAT AANCAATTAC TATCCCAGA 120  
 TAAGTGTCAA ANTCTTAGAN GAAATTGTCA TATCTTAGAC AATTTAGANG TGATGGAGGG 180  
 TGGATGATGA GAAATTATCG CACCACTGCA CTCCAGCCTG GGCACAGAG CAAGACTCTG 240  
 TCTCAA 247

SEQ ID NO:5881

SEQUENCE LENGTH:51

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06987

SEQUENCE DESCRIPTION:

GATCCACAGT GTTGGGCACA ACTTTGACGT TTCTTAAAAA AAAAATTAA A 51

SEQ ID NO:5882

SEQUENCE LENGTH:276

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06988

SEQUENCE DESCRIPTION:

GATCCTTGAT TGGTGAAAGG ATACACAAAA TCAGGCTGCT TCAGAGGAAG TCATCTGCTC 60  
 ACAGGAATCA GGGTGAAGGC CAAGGACGGC ACTCAAGAAT TGNCTGTCT CTAAAAAAA 120  
 AGCATCTGCA ACGAACTTCC TTTAATTTT GAGTTCAGTG TCTGTGATAA TTAAGAAATG 180  
 GCANTACCAT GTATTNCCC CAGAA GTTAA GANATATTGC TGNACGGACC ANTAAGTA 240  
 ATTNCAGCTC CCTCAAGNAN NATGNGGTGN GGGNGN 276

SEQ ID NO:5883

SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06989

SEQUENCE DESCRIPTION:

GATCGCGCCA CTTCTCTCTA GCCCAGGCAA CAGAAAGAGG CCCCATCTCA GAAA 54

SEQ ID NO:5884

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06990

SEQUENCE DESCRIPTION:

GATCCTTAAT TGCTACCACA TTTCAAACAA GAACTATGAC CAATTAACT TTACTGTTGT 60  
 TGAAGTCCCA AA 72

SEQ ID NO:5885

SEQUENCE LENGTH:267

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06991

SEQUENCE DESCRIPTION:

GATCCTTTGG GAATCCAGTT GAAGTTCCCA AATACTTTAT AAGAGTTTAT CAGACATCTC 60  
 TAATTTGGCC ATGTCCAGTT TATACAGTTT ACAAATATA GCAGATGCAA GATTATGGGG 120  
 GAAATCCTAT ATTCAGAGTA CTCTATAAAT NTTNGTGTAT GTGTGTATGT GCGTGTGATT 180  
 TACCAGAGAA CTACTIONAAA NAACCAACTG ATTNTTTNAA TCCTANTGTG TAGGTAAAG 240  
 TGTCATGCCN TNACCANTN CTAATGN 267

SEQ ID NO:5886

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06992

SEQUENCE DESCRIPTION:

5 GATCATAAAA ATAGCAGNGC ATGTTNCCTG ATGATTTTAC AGTGCATATT GTCATGGCCA 60  
 GGGCTTAGAG GTAGGGGAAA AACATGTGGA CAGCTTTGTG ACAAGAGTCT CTCTTATAGT 120  
 GTTCTTTTCT AAAGTAACTT TTTCTGAGTA TGAATGTNNN NNNN 164

SEQ ID NO:5887

10 SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06993

SEQUENCE DESCRIPTION:

15 GATCCATGCA AATTGTCGCA TCCGACGGGT TAACTTCTCA GACAGACTCT ACTCAGANGA 60  
 TGAGCTGCCG GCAGAGTTCA AACTGTATCT CCCAGTTCAG AACAGGGCAA AGCAATAACT 120  
 GGAATTGTGA CTCGAGGGAT AGACCCCTGG ATGTGACTCT NCTTTTAAA AGGAAACTAT 180  
 GTGGAGGACG ATGCAAAANC ATATTTATCT TAGTTTGCTC TGCTGTAGTT CTGTTATTTA 240  
 TACTTGGTGT TGCTTGTCAT GGACACNGGT GAACATGCCG TAACTCTGTG ACTGCATTGT 300  
 20 AAGTGCAGTG GGGGTAAGCA GTCCTGTGGC GTGGCGCAIT N 341

SEQ ID NO:5888

SEQUENCE LENGTH:256

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06994

SEQUENCE DESCRIPTION:

30 GATCCTGGAC TGGGTACCTT ACATCAATGG CAAGTTTAAG AAGGNTAATT AATTACACAA 60  
 ACCCTTCACA GACTGCTCTG GTGCCTGGTG GTGCTAGCTC CTCCCACCTC AGCACCTGCT 120  
 GCATCTGGAG CAGCCCAAGC CTCAGGATGG NCAAGNGGAA ACCCACAGCT CAGCTTCAGG 180  
 CTTCTTATGT TTTGAAAAC AGCTTGNTA TTTAATGCA CGTTGCATTA AACCTCACTG 240  
 AANCATAANG GGGAAA 256

35 SEQ ID NO:5889

SEQUENCE LENGTH:204

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06995

SEQUENCE DESCRIPTION:

40 GATCTTTGTA GGACTATATG TGTCAGTAAT NATGAGCTTC AATCCTGACA TTAATAACTT 60  
 ACTGTNGAGC AGAGAAGAGT TGCTTGTAAG CCTTGCTCTT TTATATACTA NTTTAAAANC 120  
 TTAAGTGAT AGTGAGCTAT GAAGTACCAA TCATGTATGA TATGTGGATA CAAAGCACAG 180  
 45 TATTATTAAG GTGTNATGTG GAAA 204

SEQ ID NO:5890

SEQUENCE LENGTH:173

50 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS06996

SEQUENCE DESCRIPTION:

5 GATCAGCAAT AAAAANAAC CTACAAAAA NCCTATATTC NTAATTNTT GCTTTTACGG 60  
 TGATATAGTG CATGCAAACC AGGAGCATT TGTGTCTTAA GAAAAATAAT CTTAGAACAG 120  
 ATGGCTGTGA AAATTACACC CATGCACAGN ACANGCCACA GGAATAATNG GNN 173

10 SEQ ID NO:5891

SEQUENCE LENGTH:156

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06997

15 SEQUENCE DESCRIPTION:

GATCAAAATAT TGGTTGAATG CCTATGTATG TCAGGCCCTG TGCTGAGCCA TGAGGATTAA 60  
 AAAGATGAAT AANCATATCT TGTTTAGGAA ATGGATGTAT AAAAAATCA AGTGCAATAA 120  
 AGTGTGTGTC CAAAAGCTGA CACAATGGAA AGGAAA 156

20 SEQ ID NO:5892

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06998

25 SEQUENCE DESCRIPTION:

GATCGCTTGA ACCTGGGAGG CAGAATTTGC AATNAGCTGA GATTGCACCN TTGCACTCCN 60  
 GCCTGGGTGA CAGAGTGACA CTCTGTTTGA AACAAACAAA 100

30 SEQ ID NO:5893

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS06999

35 SEQUENCE DESCRIPTION:

GATCACTTGA GCTCAGGAGT CCTAAACCAG CCTGGGCAAC ATAGTGATAC CTTGTCTCTA 60  
 CCAAA 65

40 SEQ ID NO:5894

SEQUENCE LENGTH:94

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07000

45 SEQUENCE DESCRIPTION:

GATCTTGAAT AATTCATAAT TCTTCCACAG TAGAAATAAA ATAATTNCTG GCTAGTTATT 60  
 TTCTTAAAAA TAAAAAAAT TTGAAAACCT CAAA 94

50 SEQ ID NO:5895



SEQUENCE LENGTH:89

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07001

SEQUENCE DESCRIPTION:

GATCCCTCTT TTCCAGAAAA TTCTGTGGAA TTTTCTGTA GGACTTTGTT CTCCACAAGC 60  
TTGAATTAAA GCAGGATTCA GTTTGCAAA 89

SEQ ID NO:5896

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07002

SEQUENCE DESCRIPTION:

GATCAGCTGA AGTGTGTTTT AGACCCAAAC CATCTGGCCC CTTGTTTTG CTCAGAGGAA 60  
GTAATNTNC ACTTAAATGA AATTGAAAAC GCCATGTGGC ACCACAAAAG AGCTCTCTGT 120  
ACTTNCCTCA TGCTGCCTCA AAAGTNCCTGT AAGTTTCGGG GTCAGTGTCC CACCCCTTCA 180  
TTCCCGANNN NNGGGN 196

SEQ ID NO:5897

SEQUENCE LENGTH:56

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07003

SEQUENCE DESCRIPTION:

GATCCCAGTT TGCCTTGCCA AATAAACTCT GTTTATGTGA ATTTATTAAA CGCAAA 56

SEQ ID NO:5898

SEQUENCE LENGTH:294

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07004

SEQUENCE DESCRIPTION:

GATCCCAGCT TTTTCCCTC TCCACAAAA CCAGGTAGTG AAGTTATATT ACCAGTTACA 60  
GCAAAATACT TTGTGTTTCA CAAGCAACAA TAAATGTAGA TTCTTTATAC TGAAGCTATT 120  
GACTTGTAGT GTGTGGTGA AATGCATGCA GGAAATNCT GTTACCATAA AGANCGGTAA 180  
ACCACATTAC AATCAAGCCA AAAGAATAAA GGTTTCGCTT TTNTNTTGT ATTNATTGT 240  
TGTCTTTGTT TCTATCTNNG ANATGCCATT TAAAGGTAGA TTTCTATCAT GTAN 294

SEQ ID NO:5899

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07005

SEQUENCE DESCRIPTION:

GATCTCCCTA CTCCATTNN CCCTTTAATT NAAGTGGCCA CATGTATATG TCTTCCCTGC 60  
 TGTGTTAGGA AAATGGGGC TGGATATCCC AAGAATCAGA GGTATATAN AAN 113

5 SEQ ID NO:5900  
 SEQUENCE LENGTH:171  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 10 CLONE:HUMGS07006

SEQUENCE DESCRIPTION:  
 GATCGCTTTT GTGACTGTCC ATCTGTCCTT GACAGTGGCT GTCATATTGA CTCCTTTGNT 60  
 GNTTTGTTGG TATTGGGGAC ATTTCCACG GCTGAGTTNT TTTTGACTGA CATGTTTATG 120  
 ACATAGACGT NGTTTTCGCA TCCNTGACTT AACTGACTT GNACNCCNTT N 171

15 SEQ ID NO:5901  
 SEQUENCE LENGTH:76  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 20 CLONE:HUMGS07007

SEQUENCE DESCRIPTION:  
 GATCTACTGT AAAAAGAGGA TTAAGNAAAA TAAAATNAGA GCAATTATAT ATATAATTNT 60  
 ATATCATACA CAGAAA 76

25 SEQ ID NO:5902  
 SEQUENCE LENGTH:118  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 30 CLONE:HUMGS07008

SEQUENCE DESCRIPTION:  
 GATCACGGGA GCAATGCTGT ACGGTTTTGT AACTGGTGG TTTGTTTCCT AGAAAACCCA 60  
 TTGNTCTCT GGATTCTAG CACATTACTA AAAGAGCCTC TNCITTTGTAA ACATGAAA 118

35 SEQ ID NO:5903  
 SEQUENCE LENGTH:185  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 40 CLONE:HUMGS07009

SEQUENCE DESCRIPTION:  
 GATCANNCTG ANCCAATTTA CCAAGCATT TTAAGGAGGA ATAATNCCAT ACCATGTAAA 60  
 ATACCATGAT ATGCTGATTA TAATACATTA ACAAATTTT AAGTTGCGTT CACTAAATNC 120  
 TGTCCTGTTT CTTCAAATA ATATAGCTTA AATTGCATGN TAATNGTATA TCTTACCTNT 180  
 TTNGN 185

50 SEQ ID NO:5904  
 SEQUENCE LENGTH:134  
 SEQUENCE TYPE:nucleic acid

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EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS07011

SEQUENCE DESCRIPTION:

5 GATCTACCCA ACTCTGTCAT CTGTAACAAC CAGTGATAAC TCTCTTGTCT TGTA AAAAGG 60  
GTTTATACAT AACTTGTACA TGGTTTCATT TTGTATTTC CGCAGATTAA AAATTTATGT 120  
ATTCTNTTC TAAA 134

10 SEQ ID NO:5905

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07012

15 SEQUENCE DESCRIPTION:

GATCGAATTN CNACCCCTAA NCTTGTCGG ACGTATGGTC CAAATTCANA TTAAGGTGGT 60  
CACCCAACCC GAGATGTCAG GAAAGGCCTT CTGCAGAGAA AATNTCCCC CACCCGCCAT 120  
CTGCAGCCAG GTGTGTGCCA CACGGCAGCC TTCCCGAAAC ATAGTATGGA TTTTAAAAAT 180  
20 GTGTTTATTT TTNTNTCTCA ACCACTTTAT AACGTATTTC TCAATTTANN TTGTAATGTC 240  
TTGTNTTGGG GNGTTGCTGG GTATCCTTNG TTATGCTTCC CACTGTTNTT NTCAC TN 297

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SEQ ID NO:5906

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07013

SEQUENCE DESCRIPTION:

GATCTAGAAT GGGGCTGCAA GNCGGTCCCC ATTTTGGATG GGTCACATTC AGACACCACA 60  
 CTATGGTTGC ATCACCTGTC ACACCGACCT AGACAGCTGG ATGCCATTG GNGTAGAATA 120  
 ACCCAGACTGG TGAGTAANCT AGAAATCATA TTACGTGAAG AGTGGCAAAA GGCCTGAGAN 180  
 AGTTTAGTTT GGNAAACATG ACTTANAAGG GGCATCACTG CCCTCNCIAT TTNTNTNANG 240  
 GCCTCATTTC CNGN 254

SEQ ID NO:5907

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07014

SEQUENCE DESCRIPTION:

GATCCATGAA GGAATCGGGA GTGGATGGAA TCGGTAAAA CTGTCCTGGG GCCGGACCCG 60  
 TNGCCCAAAG TCCGGACCNN GACCNNAAAA ACGCTTCCAT CTTAGTCACG TTAGCAGAAA 120

SEQ ID NO:5908

SEQUENCE LENGTH:93

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07015

SEQUENCE DESCRIPTION:

GATCCCAATT TTGTAAAAAT ATCTGTAATA TGTAAGCATA GGTATTTGTA TATCTTAAGA 60  
 AAAAAAGCCT AGAAATAAAG CCACAAAAAT AAA 93

SEQ ID NO:5909

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07016

SEQUENCE DESCRIPTION:

GATCTCAATN TGCAAACTCC TTGGNCTCCA GACCCCTGTC TGGNTGGNAC TCCTAGCAGT 60  
 GTGTGGTTTC ATCAGGAAAT CCTTGACGCA GGGGNTTAGA TGGTTCCTTC AGGAGGTGGN 120  
 GAGCCTCCAT AGCATTGAAG GCCAGCTGC ATCTCGCGGT GTGTGTCAC TTCTCCCCTC 180  
 ACTTTCCCCT NACCCATCCN TTTAAAGTGA TTGGCTGTGA GGAGCACAGA GGNGTGGCAA 240  
 TTCCATCTGT TNATGGGGTC AGAAGACATA GCCGNCATGG NGATTTCACA ATTNACCNNG 300  
 GTAAAN 306

SEQ ID NO:5910

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07017

SEQUENCE DESCRIPTION:

GATCATATAG AGTAGTTAAG ACAACTGTAA CAGCATTTTT TGAAATACAT TGTAAAATAA 60  
TAAAAGGTAA CATAATTAAA 80

SEQ ID NO:5911

SEQUENCE LENGTH:110

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07018

SEQUENCE DESCRIPTION:

GATCTTAAGC TCTGCTCTCA GCAGATTTC A GGTGTACCAT TTGTAAACTG TACTGAAGGT 60  
GTGTCCTCAA GAAGAAAGTG TTCAAATTAA AAAAGCTGCT GCCAAGTAAA 110

SEQ ID NO:5912

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07020

SEQUENCE DESCRIPTION:

GATCGGGAGG ACTGTGGCCA GCAATTAACA CCATGTAGAC TTCCTTAGTT CTTAAGTGGT 60  
TGAATTCGCT GNTTGTCTG TAACGTTATA AATAGTNNAT ATCTGAAGAC GGAGAGCCTG 120  
TANTATTCTT CAGATTAAAT GAAGCGTGAG ACACTTAAA 159

SEQ ID NO:5913

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07021

SEQUENCE DESCRIPTION:

GATCTCTCCC ATGCCTTTAA AGCAATTAGA ACTAGATAAT GCAGCCATTG GTCACCCAAT 60  
TAAATTGAA AGGCCAGAAA TGCATGGATT AGCACTTCAG CTTTGTGCTG AGTCAAAGCA 120  
ATTGTTACTT AGATAGAAGG ACAGTTAAAN TGAAAAATGA ATTTTGNTAA AANTGCGGNN 180  
GTATAGATAA TATTCAC TTC TTTTAA TGCTTAAACA CCCTGTATTC TGTATTNAC 240  
TTGTATCATA NTTTTCAATTG CTCATTCTTA TTCCCTGNG ATACTTATTN CTTNCACAAT 300  
ATTCTTCAN GTGGATATGT NCTTTAANTN 330

SEQ ID NO:5914

SEQUENCE LENGTH:299

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07022

## SEQUENCE DESCRIPTION:

GATCATAGCC CTNNGCCTGG CGGCACAGCA GCACTTGCGT TCTCGGGGCT GTCGATTNCC 60  
 TGCCACCTGG CCAGATAACC TCAAGATTTC CACCTTTTCT TTTCAGCTTG ATTGCAITTG 120  
 ACTATATTN ACAGCCAGTG ATTGTAGTTT CATGTTAATA TGTGGCAAAA TATTTTGTGTA 180  
 ATNATTNCT AATCCCTTTC TGAGTACTCT GGGGCCCTGC ATTTATNAGG CACCTACCTT 240  
 CATTTTGCTA ACGCTTANNC TGAATAAAAG NTTTTTGATT CCTTAANAAA AGGGNNNGN 299

SEQ ID NO:5915

SEQUENCE LENGTH:85

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07023

## SEQUENCE DESCRIPTION:

GATCCTTTGT CCAGAAGAAG CCCATGGAAT ATTGAATGTA ATACATTIAG TCAATTAANT 60  
 TTTAAGNAGA TTCTTATNTA ATAAA 85

SEQ ID NO:5916

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07025

## SEQUENCE DESCRIPTION:

GATCCAGCTC AGGGGAGCCC TCCTCCTGAC TTTGGAGACC TCCTTCCAGA AAGACTGCTC 60  
 GGAATATGGA CTCTGAGCTC TTAAGTTGCA CCCGCTGTAA TACAAATNAG TTGTTTGCTT 120  
 GAATTCGAAG AACTGTCTCT GTGGTCTAGG CTGTCTGAAA TTTCTGTTGA GGGTAAGAGA 180  
 ATAAGGAAA 189

SEQ ID NO:5917

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07026

## SEQUENCE DESCRIPTION:

GATCCCTAGG GATTNTTCAT CTTAAGACTC AAAAGGCTTA ATACCAGGAA CCACCTTGGC 60  
 AAGATATTTA CCCACCGGCC ATCTCTGTTT ACTCATGAAT GTTAAATGTT AAAACGCAGC 120  
 GCTCTAACCC TGCNTNNMAT TTAATGCAA ATGTCTGTAA TCTGTAATTG TNATGCCTCT 180  
 GATGGAATAA NTTATCTTTT TCAGTCTCCT CTAAT 215

SEQ ID NO:5918

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07027

## SEQUENCE DESCRIPTION:

GATCGGATTG ATTAATAAAC AAATNCTCTG GAATTTTNC GTTCATGCTT TTCCGTATTC 60

TTTATGGCTT TTAAATAAAT ATACAATGGT TAATAGTAAA

100

SEQ ID NO:5919

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07028

SEQUENCE DESCRIPTION:

GATCAGGGGT CCGGCTGTCC TTCTGTCCTG CTGCAGACTA AAGGTCTGGC CAATGTCTTG 60  
 CCCCACCCCG CCAGCCGCGA TACGGCGCAG TTCCTATATT CATGTTATTT ATTGTGTACT 120  
 GACTCCATCT GCCCCGTCAA ATAAAAAACC ACAAGGTTCTG AAA 163

SEQ ID NO:5920

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07029

SEQUENCE DESCRIPTION:

GATCACTGCT GCTAGCTGAC TGGACCTCCC CATTGGAAGT TTGTAATTTT NCTTTGGCAA 60  
 AGTTTCATTG ACTAGTAGAA CTCATTCTGT TTTAGTGTAT ATTTCAATAT AAATGTAAAC 120  
 ATTTTGCTCA AA 132

SEQ ID NO:5921

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07030

SEQUENCE DESCRIPTION:

GATCCTAAGG AAGGAAAAAG AAAGTGTTAA AAATTAATAA AGGTTTTTTT GAATCCCGTG 60  
 TCCTTCAAGT GCTTTCTAAC TTTGAGAGGA AGAAATTGAC CACCTGGACT ATGGAAGTGT 120  
 GCGTAACAGC TTTGAAAGTG TATTTAAAAA TTAANTCTAT ATGCCTTTAA NTCAGTGAAT 180  
 TGGAAACATA TTACATGNGN TTNNATGATT TNCCTCAAAT ATANTAANTN GTTTCCTTTC 240  
 CAGTAGAAA 249

SEQ ID NO:5922

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07031

SEQUENCE DESCRIPTION:

GATCTGCAAG TAGCCTAAAA ATGCGATTGC TGGTAAACCT GGCCTCAAAT TTCATACTAC 60  
 CATAACTNNT TTTATATATT GCCACTAATT TTGACTGGAT TTAATAGCAC TTTATTGTAC 120  
 AACTACAAAA AAAAAANTNTA TTCCTGGANT TGTGCCNGT GTAATTNCTC TAATGTNCTG 180  
 GTGCTTTNCA N 191

SEQ ID NO:5923

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07032

SEQUENCE DESCRIPTION:

GATCTTATTT CATGAAGTT GTATAAATGA AATCATTGAG TAATGTATCT TTTAAGACA 60  
GGTTTTTTTT TTCNCTCAG CACAATTTCC TTGAGGTTCA TCCAGGTTGT TACCCATAAT 120  
ACCAAGTTTGT NAGTCTTTAT TGCNGTAGTC TATAGCATGC TTATATCACA GTCTGNCCAA 180  
CCATTCACCC NTNGATGGGC ATATGGGCAT TNCCNGTTTG GNGCTATTNC AANTAN 236

SEQ ID NO:5924

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07033

SEQUENCE DESCRIPTION:

GATCTNTTTC ATAGTGTTC AANCTGTATT ATTATATGTA GAGGGAAATA ATTTTCTCAA 60  
CACTAATCGT TAATAACTAT TGTATTAAAT NGTCATNANG N 101

SEQ ID NO:5925

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07034

SEQUENCE DESCRIPTION:

GATCTGCAGT TTCCCCTTTT NTCCCCTCTG AAGAGTGGT CTTATGTGCA ATCTGCAGTA 60  
ACCTTGAAGT CCAGAGCTGC ACTATAGAGG AGAATGCATG CCACTATGAC AGCAGTATGC 120  
CAAGCTTTGT NTTTCATCTCC TAATAAACGT TAAGACCTTT GGTGTAATAA ANGACAGCAGC 180  
ATTCACCAAC AAA 193

SEQ ID NO:5926

SEQUENCE LENGTH:251

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07035

SEQUENCE DESCRIPTION:

GATCTGGGGT AGGGGGCACC CTACAGTGGG ACCCNTCCCN CATTATTCTT TCTNTCCAGC 60  
CCCTCCCTCC CACTGGAGCA GCTCCAGAGN CATTCTCAC CCCCCTNACC TCTCCCAGCC 120  
AGGGCTGAGA GBAITCGAGG TGGCTGGGAG GGTTCAGG CCCCCTGCCC CTTNCCCACA 180  
AACTGGGTGN TAGGGCGGAC TTACCTGGCC CAGCCCTGCC TCCNTNAGCC AACCAGNCC 240  
NTNGGCTGT N 251

SEQ ID NO:5927

SEQUENCE LENGTH:132



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07036

5 SEQUENCE DESCRIPTION:

GATCTCGATA TITCAAATGG GCTTTNATG CACTGTTGCC AAGAAAGGCT TTTCCTGATT 60  
 TTTTNACAAN TNAATTTTGG CACACTTTCA TTGGTGTCTT TCGGCAACTT ACATTGAAAN 120  
 TGAGCTATTG TN 132

10

SEQ ID NO:5928

SEQUENCE LENGTH:90

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS07037

SEQUENCE DESCRIPTION:

GATCCCTGGG TTGCCCTGTC CCAACCTGCT TGTTAGGTGC TTCCCATAG NAGGCCCTTC 60  
 TTGAGAAACA ATAACTAGG TAGAACTAAA 90

20

SEQ ID NO:5929

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25

CLONE:HUMGS07038

SEQUENCE DESCRIPTION:

GATCTCAAAA CTCATTTGTT GTACCATATA TNATGGTTTT NTGCTATAT CATATATTC 60  
 CCTACTTATG TGTTTAAATN CTATTTNGTN ATGTCAATCT CTCTGATGCC ACCTATTTN 119

30

SEQ ID NO:5930

SEQUENCE LENGTH:252

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35

CLONE:HUMGS07039

SEQUENCE DESCRIPTION:

GATCGGGGCC AGAGGCAGAA CCCTGGTGAG GAAGCTCCAG TCCTGCTCTC TACCCAGCCC 60  
 ATCTTGCCTC CATGGTGCCT CTGGAGGCCT CTGGGCCTCC TCTAACAGGG GCTGGTGGGC 120  
 ACCAAGAGNC AATGGAGTAG ACCCCTGGNT GGTAAGGGNC AAGTCCACC GGTTGCTTCT 180  
 40 GGGAAAGGGT TTCTAACACT AGTTTGTTG CTGTGGTTCC TGGGGTGCCC TCCACTGCCC 240  
 TCTNTTCAGG AN 252

SEQ ID NO:5931

SEQUENCE LENGTH:76

45

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07040

SEQUENCE DESCRIPTION:

50

GATCCCACTG CAGTGGTGCC TACATTTATC ATCATGGCTC CTCTTGAATA AAATCTACCT 60

55

TACCATCTTC AACAAA

76

SEQ ID NO:5932

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07041

SEQUENCE DESCRIPTION:

GATCAGCACA GTAATGCCCA ACAATATTGT TTTTAAACAA AAAATGTAAA CATTCAAAAG 60  
 AATCTCTCTA AATCACTGAT TAANTCATTT GACTGAAAAC AAA 103

SEQ ID NO:5933

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07043

SEQUENCE DESCRIPTION:

GATCTACCCG NCTNGGCCTC CCAAAGTGCT GGCATTACAG GTGTGAGNCA CCGTGCCCGG 60  
 CACCAGNATC CTTTGGTATA GCCAAGCCTT TTGGTTACCG NCTCATGAAG AATATGCTTC 120  
 CCGCATTGTC CTAGTCCCAG TTGTATTCTC ACAGGTGTTA TGNNGGGGGC ACAATCCAAA 180  
 TNATAAACCT GGTTCATGNC CAACANATTT NTGCTAAATA GGGAGGNGGG N 231

SEQ ID NO:5934

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07044

SEQUENCE DESCRIPTION:

GATCTGAGCC CAGCGTACAG AGAAGGCTCT GTGCAGACAC TGCTCACACC TCCAGCTCCC 60  
 AGCTCACCTG CCCACAGGT GCCAGGNTAC CTNTTTNANT GGCCAGCAGG GCCCTNACCA 120  
 TCCTCAGCCT GCNTTCCAGT CGCCATTCT TTCCATTCTG CGGCTCGTGC TTTAAAAGCA 180  
 ACCAGCCAAC CNTTTNTGAT ATAGTAGGGG ACTTGAAAGG GGCTAAGAAG ACTGANGATG 240  
 GTCTGCCACC TTTAACCACA AGGNTTNGGG CTTTGGTTN 279

SEQ ID NO:5935

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07046

SEQUENCE DESCRIPTION:

GATCTAGGAG AAGGGNCTCA TGGGGACCCT CACATGGGCA GAAAAATGGT GGTCAATTGGC 60  
 CGACATCACA GTTTTCNGT TTCCACCCA GCTAAAAACC GTTGTGCT TTAANTTTNN 120  
 ATAAACTGGA ATCCTTTTAC CCGCTCCTAC AGCTAACCT CACANGCATG AGGTGCTGTG 180  
 GCTGTNCCTT ATCCTAATGA TGGGCTNNGG NCCCGTAAAT GTNAACACTC ATGAN 235

SEQ ID NO:5936

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07047

SEQUENCE DESCRIPTION:

GATCAGTTAC ATTCATCAGT TGGTGAGTTT TGAAGAATAA CTACATTNA TTTCAAAC TA 60  
ACAAATGTAT ACGGTTT TAG TTCAGTGTG AAGAATTNA ATACAATATT AANTNNCTN 119

SEQ ID NO:5937

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07048

SEQUENCE DESCRIPTION:

GATCCCTTTT NAAAAATATA TGTATGCATG TNTGCATTAA AGAGTCTGAA AGGATACTTG 60  
CCAAAGTGTA AAAGCATTTA TCTCTGGGAG GTGAGATTG GAGCAATTAT ATTTNCITTT 120  
TGCAATCTG TAACTNCTNA TTTCCNCAA TGNGCATGTA GTGTCTGTAA AATTTTCAG 180  
GGAATAANCA NTGATGTTCA CAATATATAT TNN 213

SEQ ID NO:5938

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07049

SEQUENCE DESCRIPTION:

GATCCAGACC ATCCTGGCTA ACATGATGAA ACCCTGTTGC NTGTNGTACC AACTACTTGG 60  
GAGGCTGAGG CAGGAGAATG GCATGAACTC GGGAGGCGGA NTTGAGTGA GCCTCCAGCC 120  
TGGGCAACAG AGTGAGACTC TCTCAAA 147

SEQ ID NO:5939

SEQUENCE LENGTH:299

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07050

SEQUENCE DESCRIPTION:

GATCCTGGGA GCCTCTGTTT TTTGCGCATT TCAGACACAG TCTGTGTGGC GAGGAGTGTG 60  
ANGGNAGGAG CCTNGGGTGC AAGCCCGTGT NTTTGGCCTC TTTCTCGTG AAGACGATGT 120  
GTCCCCGTCA GAAAAAGTGG GCTCCNTCTG CAGCCCCGTG AGCTGAGCCC AGGCTGCGTA 180  
GTGACCACAA GCTTATGTGN AGCACTGCTC AGGGAGGNTN TCAGGAATTC CCCTCACCTC 240  
GGAAAGGANC TTCTCAGTTT TTATTGGGGG TGTNTAAATT TNCITNCATA TNGTTCATN 299

SEQ ID NO:5940

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07053

SEQUENCE DESCRIPTION:

5 GATCCTTCAG GCAGTAAGGG AGAGTTTTGC CTCCTTACAC AGTGGCCTTT GCTTGACCT 60  
 CCAGCTGGAG ATGGGTGTGC CCCAGAAGTA AGCTTTGCAT CTCTTACAAG AGGGGAGCTA 120  
 CAGGGGCAGC CGTGGCCTAG GCCCAAAC TCCTCTGAGA AAATAAATAT CTGTACCACC 180  
 TGTAAT 186

10

SEQ ID NO:5941

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS07054

SEQUENCE DESCRIPTION:

20 GATCCGGTNA TGGTCTGGGC AGAGGCTGGG TCAGGAGTCC CAAAGGTCAG TGACAGTTTC 60  
 TCAGAAGAGG CCCAGCGTCC ACCTCTCTCC CAGGGCCAGA CACCTCTTCC TGGCTCCCC 120  
 ATCCCCCTAT GGGCTCCAG CNCCTGCAC CCTCATTGCT GNNMAGATTA AAGCCTCTGT 180  
 TTTGCACCTG TCAA 195

25 SEQ ID NO:5942

SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07055

SEQUENCE DESCRIPTION:

30 GATCAATCAC TGTITNGTT TTAAGCTGG TCAGTACTAT GAAGCTTCTG TGGTTGTAT 60  
 GATGTTTAA CTTTCACTTT AAAGTGCATA GAATAAATTA AATTGAAAAC ANCAA 116

35 SEQ ID NO:5943

SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07056

SEQUENCE DESCRIPTION:

40 GATCCGNAAG CNAGANACCC TGCAGGCTGG CGGGGACCCA NGGAAAGGC CTTCCAGGC 60  
 CTTCTAACC CCTGTGGCC TGGACTTTCC TTGTNTGGAC TCACCCAGG CCTGNN 116

45 SEQ ID NO:5944

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07057

SEQUENCE DESCRIPTION:

50 GATCATAATC ACTGCCTTAC CNNCCTCAG GTTGTNGTAA GGAAGTGTG TGTGGAAGTT 60  
 TTTAATAAAC TTTGATGCT AGTNTACTTA GGGGTGTNC CAGGTGTCTT TAATGGGGCC 120

55

TTCCAGACCC ACTCCCCACC CTTNTCCCT TCCTTTGCCC GGGNACGNCG AACTCTCTN 179

SEQ ID NO:5945

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07058

SEQUENCE DESCRIPTION:

GATCTAGATT AGCAATATAA AGAAGCATAG TGGTACTCTG TTCACACTT TCAGTAGATT 60  
TATTAGAAAGT CAAATNCTAT TCAACAGACA CTTATTAGGA TATACAATA ATTTANGAAT 120  
AAAATTCCAG GCACAATATA TTTNNNTNAA NTGGTATTG TNAGTN 166

SEQ ID NO:5946

SEQUENCE LENGTH:230

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07059

SEQUENCE DESCRIPTION:

GATCTTTTGT GACTACAACT TCTNTTGTA ATAATGATAT ATGGTATTNC CATCGTCAGT 60  
TACCGAGTAT AGCCACTGGG TATCACTACT TTGTGTTAAA GTGCCTTCGC ACTTTAAGTA 120  
CATTACTTAA ATGTTGCTTT TAGCTTTGAT AAATGAAAA TATTTNAATG GGNNGGGGNN 180  
TTGAAATTGA AAACACTGTA AAATAGGTTG GNGTGTGAGC NNTATTANGN 230

SEQ ID NO:5947

SEQUENCE LENGTH:177

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07060

SEQUENCE DESCRIPTION:

GATCCGCCTA CCTTGGCCTC CCAAAGTGCT GGGATTACAG GCATGAGCCA CCATGCCCAG 60  
CCAGNGATTT AATTNTAAT AACTAATTN AGGGCACAAT TTGACCTCCA TTGNCAGCCT 120  
GTTTGTATTA CTTAATGTGA ATATNTGTGT GTTTTGCCAN GGGNTATTGA NGTATTN 177

SEQ ID NO:5948

SEQUENCE LENGTH:96

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07061

SEQUENCE DESCRIPTION:

GATCTCCAGG CCCAGCCTGG CCCCAAATAT TCTTTCCTTT CATCCTCAGC AAGTGCTGAG 60  
TCTGTGAATA AAGCCACATA ACCAGCGGGC ACTAAA 96

SEQ ID NO:5949

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07062

SEQUENCE DESCRIPTION:

5 GATCATAAAG CCACCGGCCA CTGCCACGCA TGTTCACCT GTGCCATCGT GTCCTCCTCT 60  
 GATGGGCACC GTGGTGGAGG AAGTCACCCA GCTGTTTCTC AGTCCCAGAG GCCGGTGGCT 120  
 GGTITTAAC TTGTGTTGAC TGTGATACT TATTACTGT ATAAATATAA TTNATCATTT 180  
 GTACCATGAA A 191

10

SEQ ID NO:5950

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS07063

SEQUENCE DESCRIPTION:

GATCCAACTG GGAGAACCTC AGCCAATGCT GGAAGNATGA TTGAAGTACC TCTCTTTTNT 60  
 NACTCTTGTG CAGCTTAATG TGCAATAAAG GAAAAGTTAT ATCTGTAAA 109

20

SEQ ID NO:5951

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25

CLONE:HUMGS07065

SEQUENCE DESCRIPTION:

GATCGACCTG AAACCTCCTCA CCAAAGTNCT CGNNCCGGAG CACGAAGTCC GGGAGGATGA 60  
 TGTCCACTGG GACTGGGACC ATCTGTTTAC TGAGGTGTCC TTAGAGGTCC TCACTGAGTG 120  
 GGACCCACTG CAGACGGAGA AGGAGNACCC TCGNGGCCAG GCCATNCACA CCTNAGCCCG 180  
 30 TCACCCATGC TCTAGACATN AAGAANTGCA ANGGGN 216

SEQ ID NO:5952

SEQUENCE LENGTH:192

35

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07066

SEQUENCE DESCRIPTION:

GATCCACCAA AATAAATGAT TTTCTACATT TTCATTTGGA CTAAATCCCA CGAATGACAA 60  
 40 CTACCACCTT TTTTCCTTT TTAATTAATA CTAAATATTG TGATTCTTA TTTGAGGTTT 120  
 AAAATGACCT GCTTGAAACT TTGATACATA TTGAATACA TTATGTTAAT AAACCTGTAG 180  
 CTTTTGTGA AA 192

45

SEQ ID NO:5953

SEQUENCE LENGTH:298

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07067

50

SEQUENCE DESCRIPTION:

55

5 GATCACACCC TGAACAATT GGNNGATTGC TTGCTGCCCT GCATCTTAAG GCGTATTCTA 60  
 GCAGCAAAGC TTGTNATGCA CTGACTTGGG GCAAGTAAAA CTGATGCTGA GGACAAAGGG 120  
 AGANGATGTT CCTCGCCCAG GGAAATNAAA ACTTTNCTNA TTCACCTTGC TTGTGCTTAA 180  
 NCATTATGT NCATCTAGTG TAGAATACAT GGCTACTTGT TTGTAATTNT NTNATTGGTG 240  
 GAATTAAAGT AATTTCCCT TATCTTTGAN CTTTATTTA GAGAACTNAA ANAAAGCN 298

10 SEQ ID NO:5954  
 SEQUENCE LENGTH:250  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07068  
 SEQUENCE DESCRIPTION:  
 15 GATCTNCAGG GGNATGTTT ACCATCTGNA TCCAGCCTCC TGCTAACTCC TAGCTGACTC 60  
 AGCATAGATT GTATAAANTA CCTTTGTAA C GCTCTTAGC ACACCTCACAG ATGTTTGAGG 120  
 CTTTCAGAAG CTCTTCTAAA AAATGATACA CACCTTTCAC AAGGGCAAAC TTTTTCCTTT 180  
 TTCCCTGTGT ATTCTAGTGA ATGAANTCTC AAGANTCAGT AGANCNAATG ACNTTGGNAT 240  
 20 GTAATGNTNN 250

25 SEQ ID NO:5955  
 SEQUENCE LENGTH:135  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07069  
 SEQUENCE DESCRIPTION:  
 GATCCGTNAA TNCNCGGAAT GGCAGGGGAA GCCTTGCACT AGGTTGCAGA GAAGCATCCT 60  
 CCACATCTG TGTCAGAAAC CCTGGTCTCC GTGGCACTTG TAACTACCG TNCTGTCTNC 120  
 30 TGGTCTGTNT GTGTN 135

35 SEQ ID NO:5956  
 SEQUENCE LENGTH:193  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07071  
 SEQUENCE DESCRIPTION:  
 GATCTAGAAT TGACATTTTG CCTTCTGTT TCCAGGTGTT TCTATTTTT CTATCTTTC 60  
 40 AGAGAAATCT CATATTCGG TGTATTTATT GCTGTACTA CTATATTAC TGCTGAAAAC 120  
 TGTAACAACC TGAAGATTG TAAATGTTA AACATAGTTC ATTAATAATA ATAAATAAA 180  
 TCTAAATGT AAA 193

45 SEQ ID NO:5957  
 SEQUENCE LENGTH:273  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07072  
 50 SEQUENCE DESCRIPTION:

55

GATCCTCCAA AGGCCTGCCC CATGNATTTA ACAGTAATAC AGGAAGCATG GCAGGCACCA 60  
 TGCAAAACCA GGATGGATGG TGCAGTCCCT GTGTCAGTGG GCGGTGGTTT CCTGCTGGCC 120  
 TGGAATCACT CATCACCTGA TTGATTGGCT CTGTGGTCCT GGGCAGGTGC CTCATAGGTG 180  
 TGTGGNTATG ATGACGTTTC NNTAAAATGT ATGTNTTTAA CANATACTNA ATNGTATTAN 240  
 GGTGATGTAC CAATGGNTTT NATAATGTTT NTN 273

SEQ ID NO:5958

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07074

SEQUENCE DESCRIPTION:

GATCAGAAAG NATTAAATAT CACTACCACA TGAGTTAAAA CAAAAATGG AATAAAAAANC 60  
 AAAAGTGGTG TCTATGTTAT CAGTGGNTTA CTTGATAGGN CATTNAN 108

SEQ ID NO:5959

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07075

SEQUENCE DESCRIPTION:

GATCTTCACA AGGNTTGTAT TGGCCACATC CACGTCCTCC GAGCCTACAT CAAGACCCAA 60  
 GTGAACAAAG AGCTGGAGCA GCTCCAGGGG CTGGTGGAGG AGCGGCTCAA GGCCAGCGAG 120  
 GAAAGGCTCA GCAGCAAGTT GACTGCACTA GAGCGGCCCT TCCAGCTACC TCCGGGTAAA 180  
 GGCAAGAGCA AGACCAAGTG ACCCCAACA TTTCCCAA TAAAGGTCTG GGCCAGANTG 240  
 GCACCATCCC TGCAAA 256

SEQ ID NO:5960

SEQUENCE LENGTH:262

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07076

SEQUENCE DESCRIPTION:

GATCTAGTCA TCTGGTTAAG GATTTTAAGC AGATGCAACT ATAAACCCAA GAAACTGTAT 60  
 TACTATTACT GTTGGTCATA CTAAACCTGT CTATTCCTG AAGTATATGA CCCACAAGGA 120  
 TGTGGAATAA CTAGGAGAAA CTGTTTTTGT ACACTGTACA TCCTTAGTAT TTTTACACGT 180  
 ATATGATAGG GATGAACATG ATTTNCTTC GTACAGACAG CTTANNTAAN GCACATATGC 240  
 ANTCTGCAAA ANAGNNNNN NN 262

SEQ ID NO:5961

SEQUENCE LENGTH:295

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07079

SEQUENCE DESCRIPTION:



GATCTCAGCT CACTGCAACT NNTGCCACCT GGGCTTAAGC CATCTCCCA CTCAGCATC 60  
 CCAAAATAGCT GGGACTGCAG GCACACACCA CCACACCCAG CTAATTTTNG TATTTTGT 120  
 AGAGACGGGA TTTCACCATG TTGCCCAGGC TGGTGTGAA CTCATGAGCT CAAGTAATCT 180  
 GNTGGCCTTG GCCTCCCAA GTGCTGAGAT TATAGCGTG AGCACTGCAT CCAGCTCACT 240  
 CCTNATTTCT TTCTAGCCCC AAAGGGGTTG AGTCAGCAA TCCTNCAGCC TTTN 295

SEQ ID NO:5962

SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07080

SEQUENCE DESCRIPTION:

GATCCTGGAA TGTTCGCTGG AGAAATTTAA AATACNGGGG TTTTTNTTT AATGGTGCCT 60  
 ATTTAGAGTT GGAAGTTGAA CAGCTGTTGC ATTACATACT TTTCCTTTT NATTGAAATT 120  
 TTGAAATCAA ACGTCTTGAT TTTCCTNTCC TGTGGAATTG CTATGTCAG GATGTCCTAG 180  
 GGGGTGGGGG CAGGGACTCT TTTCGTAATA AGCACTTGTN TTATNTGGTG TGTGTGGNGT 240  
 ATAAANGGCT ACACCTTAT TNTAAAAANN NN 272

SEQ ID NO:5963

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07081

SEQUENCE DESCRIPTION:

GATCTGTCGT CTCAAAAAA ATGGCAAAGT GGGAAATGTG GGAGGGGAAA ACACTTCAGA 60  
 ATAAAAGAGA TTAAAGAGAT GTATCAACAA A 91

SEQ ID NO:5964

SEQUENCE LENGTH:194

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07082

SEQUENCE DESCRIPTION:

GATCAGGTTG TCTGCATTTG TTGGTGTAAG TGAACATCAT CACAGTTATC CTGAGTTGAG 60  
 TTTAAGCCAA ATANATGCAT AGAAAAGGT CTCCTATTA ATGGAAGANG GTAATTTTAA 120  
 GGATGTGTAT TATTTCAATT TTGTATGTTT AACTNTNATT NAATAAAGTG TTTTAAAAAT 180  
 CNCAAAAATN ANNN 194

SEQ ID NO:5965

SEQUENCE LENGTH:266

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07083

SEQUENCE DESCRIPTION:

GATCTGCCTG AAGAAAATAT CTGTTTCTA TATAAAAAA TTTTAAAAA TAATTGTAAA 60

GTTAGATTTA AAATTGTAAA ATATAAAATC ACAAAGGAAT GTACCTTATG AATGTTGTTG 120  
 ACATTTTATG AAATTATGTG GATTCAATTT ACTGTTACAA GATAGANTTG AATGCAAAAA 180  
 GTCCAAAACC TCAATAAANT TTGAGGAAAA CGTGTATTATG TGTAAATTGAN NTANAANCAT 240  
 TTTATAATTG TGCANGTNAN NNNNAN 266

SEQ ID NO:5966  
 SEQUENCE LENGTH:256  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07084  
 SEQUENCE DESCRIPTION:  
 GATCCTTTTN AGTTTTTCCA GGTGAGAAAT CCTATCAATT ATGTNATAAT NATATGTTTT 60  
 CCTNTTCAAA ATTTATAACA TAATTCCTGA CTGCATGGGT TAAACATTN CATAACAGTG 120  
 CTAAATAATA AAGGTGGCAG TGGCATTITT GTCTTGTTTC TCATTTTAGC CAGAATGTGT 180  
 TTGCTACAGC AATTCCAAAT TGTGTTTTGT GAAAAANAAA TATTCTNCTT NGGAGACANG 240  
 GNNTNTACAT TTGCAN 256

SEQ ID NO:5967  
 SEQUENCE LENGTH:119  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07085  
 SEQUENCE DESCRIPTION:  
 GATCAGAACA GGCTTAAAT GATGCTATAG AACCAATTAC TCTGTATTAT CTTTGCAACT 60  
 CTTTTGTAAG TCTAAAATTG TTTGGNAATA AAAGTTTATT TTAANNNTTA AAAAAANNN 119

SEQ ID NO:5968  
 SEQUENCE LENGTH:146  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07086  
 SEQUENCE DESCRIPTION:  
 GATCTTCTAA TCGACAATCT ACATCATAGT GACCACCAGT AATCACCTGT AAGAGATTAA 60  
 AAAAGAAAAA TCACTGTGAA AAGTGTGAAA AATTAATCAG ATTTAATCAG ATTTCTTATT 120  
 AAAATGGCAA TAAGGTGATG GGCAA 146

SEQ ID NO:5969  
 SEQUENCE LENGTH:203  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07087  
 SEQUENCE DESCRIPTION:  
 GATCTGGTTA AGTGTGCGGC ATCTCATCCC CCACTCTNTC CCTTCTTGCT CCTGCTTCCC 60  
 CCTTATNACT TGCCAGCTCC TGCTTCACCT TCCACCATGA GTAAAAGCTC CCTGAGGCCT 120  
 CCCCAGAAGC CAAGCAGATG CCAACACCAC GCTTCCTGCA GCCTGCAGAN CTGTGAACCA 180

ATTAAACCTC TTTTCTTTAT AAA

203

SEQ ID NO:5970

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07088

SEQUENCE DESCRIPTION:

GATCTTCCAA AAATTATTATA AGTGTTTACT TTAAAGTGG AAACAATGTT TTAAAGAGGT 60  
 GATATAAAGA AA 72

SEQ ID NO:5971

SEQUENCE LENGTH:106

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07089

SEQUENCE DESCRIPTION:

GATCCTAGC TTGTTTCTG TCAGTCATNC ATTGTAAGTA GCACATNGCA ACAACAATCA 60  
 TGCTTATGAN CAATACAGTC ACTAGGTNTT AGTTTNTTTT AAATAN 106

SEQ ID NO:5972

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07091

SEQUENCE DESCRIPTION:

GATCTGTGTG ACTGATGGGC AGGGCTCAAT GATGCCCAT GAACTGAGCT TACTGCTCAC 60  
 ACCACTGACC TGGACCCNAA CAAAAAGCTG ATTGTCTTTT TAAAAGTTAT TATTTTGCCC 120  
 TGAGCAAATT GCATTTTANT TGGGGCAGTT GGAGTGTGA NTTCTGGCA GCATTGTGAA 180  
 GNNGACCNNG GTGGANGTTT NCTGTCCCNNG GN 212

SEQ ID NO:5973

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07093

SEQUENCE DESCRIPTION:

GATCTACCCA CCTTGGCATC CTAAAGTGCT GGGATTACAG GCGTGANTAC CAAGCCCGGC 60  
 TTTTTTGTGTT TTGACATGGA GTTTCGNTCT TGTACCCAG GCAGGAGTGC AGTGGCGTTA 120  
 TCTNGGTTCA CTGCAACATN CGCCTCCTGG NITCAAGTGA TTCTCCTGCC TGAGCCTCCC 180  
 ANGNACCTGG GNTTACAGGT GCTCCNACCA AGNTN 215

SEQ ID NO:5974

SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07094

SEQUENCE DESCRIPTION:

5 GATCTGGAGG TTTACAGAAG CCTTACCCA TCCTGAGACT CAGTTCTGCT GTTGGTCTNC 60  
AGAGAAGTGT CTGCACCTGC TGAGANGNAA TCACACCACT GCACTCTAGA CTGGGCAACA 120  
GNGCGAGACT CTGTCTCAAA 140

10 SEQ ID NO:5975

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07095

15 SEQUENCE DESCRIPTION:

GATCTGTTGA AGAACTCAGC TGCTGGAAAC CATGCAAAAT GTTTTGAATT GCCCTTAAAA 60  
TATGGAATAA GTTTTCTGAA TGCTTTATAT TCTTCTGCT GTAAATTAAA AATGANGAAA 120  
ATTTCCTCAT AAA 133

20 SEQ ID NO:5976

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS07096

SEQUENCE DESCRIPTION:

25 GATCCCTGCC CTTTGGCACA TCCACTGAAA GGCCAAACAG CAAGTCCGAG TGAGTTTAA 60  
ATATTAAATA ATCACCCTTT ATTTTATACA CTTGAGAGTG ATTGTAATAA AGGCTGTCAT 120  
TAATAAACTT GGTCTACCT TAAA 144

30 SEQ ID NO:5977

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS07097

SEQUENCE DESCRIPTION:

40 GATCTAGAAA TTGCCCTCCT TTTACCCCTA CCATGAGCCC TACCAAAACC AAACCTTANCC 60  
CTGGGCAACT AANTAAGGTT ATTGGACATN CCCTTCTNAA TTAATNATCC AATN 114

45 SEQ ID NO:5978

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

50 TOPOLOGY:linear

CLONE:HUMGS07098

SEQUENCE DESCRIPTION:

50 GATCTGACTT CAGACAGAAA CCAATACCAG CTTCTTTTC CTTTAAACNT TTGAAGAGTG 60  
TTGATTTGTT ACTATATTAC GTATGCAAAA CTGGAGAGNG TATNGNTNGA TN 112

55

SEQ ID NO:5979

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

5 TOPOLOGY:linear

CLONE:HUMGS07099

SEQUENCE DESCRIPTION:

10 GATCCGTCCTC TAACAACTA GGAGGCGTCC TTGCCCTATT ACTATCCATC CGTCAATCCG 60  
TAGCAATAAT CCCCATCCTN CGATTATATC CAAACAACAG ANGCAATTGAT ATNNTNGCCC 120  
NACGTAAGGG N 131

SEQ ID NO:5980

SEQUENCE LENGTH:126

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07100

SEQUENCE DESCRIPTION:

20 GATCATGTAG GACGNGGCAT CCTGCCCCTG GTAGAGAGGA CGAATNTTCC AAAACANTGG 60  
GCTCTACGGN AAAAAGAAGT AGGTTAGTCA CCTTCTGGAC CCTGTCTAAC TCGTTTGCTN 120  
AANAGN 126

SEQ ID NO:5981

25 SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07101

SEQUENCE DESCRIPTION:

30 GATCTTATTT AACCAAAGAC TATTTTCATC CTGATATGAT TTGTGTGCTT GATTAATAATG 60  
GNANTTAATG ATATTGAAA 79

SEQ ID NO:5982

35 SEQUENCE LENGTH:271

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07102

SEQUENCE DESCRIPTION:

40 GATCAACAGG CTTATTAGAA GAATGAACTA AGGTGAGAGA CCTCATCCTG AGAAAGGTTG 60  
AGTTAATGTT AGAGTATAAG TGGTGGTAAT CTTGAATACT TTTCCCATTA AATATTGATG 120  
GGGGTTTGAN TTTAATCAG TGCTTTTNTG GGNAGTGGGG GTCAACTATC TTAATGATTA 180  
CAGTTGGTTT GTTACTGCT TTTGAGGACC TTTCTGGAGG AAAGGAAAAG CCTGTTTTGG 240  
45 GGAGTCTTTA AAGATGGAAA TTGGGTGGTC N 271

SEQ ID NO:5983

SEQUENCE LENGTH:125

50 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55

CLONE:HUMGS07103

SEQUENCE DESCRIPTION:

5 GATCAATATG TGA CTGGAAC CATTGGCGAG GATGAAGATT TGATAAAGTG GAAGGCACTG 60  
 TTTGAGGAAG TCCCTGAGTT ACTCACTGAG GCAGAGGAGG ANGNATTGGN TTNNGAACCT 120  
 GCNTN 125

SEQ ID NO:5984

SEQUENCE LENGTH:73

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07104

SEQUENCE DESCRIPTION:

15 GATCTNATTG TATTGTGAA GGACTATTTT TNAACCTGTC CAAATAAACT CTGCAAAGNA 60  
 TTTCCACAAG AAA 73

SEQ ID NO:5985

SEQUENCE LENGTH:331

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07105

SEQUENCE DESCRIPTION:

25 GATCCTGCCC TGCTCTCAGC CATAGTGAAG GACCAGCCCT AGGAGTCTGC GAGAGCCTCC 60  
 TTGGTTCCAT CGTGAAGCCA TAAACAGGAA TGCCTTTGGC AATAGCCTTG AGCCTAGAGG 120  
 GCCCTCTNAT GGGCCACTGA GGTGCTGTTG GTTTATTGCT GGCANCGTGA ATTCTCTCAG 180  
 GGGTCTAGGA GGGGCATTTT GGAGACTGCC TGACANCACC NCTATCCCCT GCCTCCCN 240  
 CTNAGAAGAG GGTGGAAGNA TGAAATGAAA GCTATGGGNC TTTTGGGAGG NTAACCCAGN 300  
 30 GTCTATTCTA GGGTTNGNGG AAGTGNNTAA N 331

SEQ ID NO:5986

SEQUENCE LENGTH:107

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07106

SEQUENCE DESCRIPTION:

40 GATCCCCTGG CCTGGTGCCC AACTGCCTC GCAAGCGCTC GCCACCCTCA CGTGGCTCAC 60  
 CTGCTGTTGA GCCTTGCTGT GTCAATAAAC GGTGTGAGGA TTGCAAA 107

SEQ ID NO:5987

SEQUENCE LENGTH:83

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07108

SEQUENCE DESCRIPTION:

50 GATCAGATAT ATCCACAACG NGTTTAAGAT TTTCAATATT CTTAGAGAAA ATCAATAAAG 60  
 TCAATAACTA CTCCACCATG AAA 83

55

SEQ ID NO:5988

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07110

SEQUENCE DESCRIPTION:

GATCAAAAAT TGTGGACATA TCTGCAAATN ACTACCTATA GCCTCATGAA AGTACATTTC 60  
 ACAAATGTA AANNCAATG AACACTAAAT TTAAGAGCAG TTACAGTGTG ACTCACTCAT 120  
 GTTAAAAAA ANTCGGNGAG CTAAAAANTA CGTCTAN 157

SEQ ID NO:5989

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07111

SEQUENCE DESCRIPTION:

GATCGAGTCT GCTCTGACCT CTCAATCTCC TTCTCTCCC AGGCTGCTGC TCCTGCTGCC 60  
 CTGTGGGCTG TGCCAAGTGT GCCCAGGGCT GCATCTGCAA AGGGGCATCG GAGAAGTGCA 120  
 GCTGCTGCCG CTGATGTCGG GACAGCCCTG CTCCTAAGTA CAAATAGAGT GACCCGTAAA 180  
 ATCCAGGATT TTTGTTTTT TGCTACAATC TTGACCCCTT TGCTACATTC CTTTTTINCT 240  
 GTGAAATATG TGAATAATAA TTAACACTT AGACTTGAAA 280

SEQ ID NO:5990

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07112

SEQUENCE DESCRIPTION:

GATCTCCAAG CAGGAATATG AGGAGGGCGG GAAGCAGTGC GTGGAGCGAA AGTNCCCCTG 60  
 ATGGCACTCC TCCCACACA CCTGCTCCCA AGCTCAGATG GAAGTCCCTT AACCCCATG 120  
 CCACATTGCC CCCCTCCTCC TTCTCTCTT GTCCTCATT ATGGTGATGT TTCTGGGTTG 180  
 AAAGAAGTAA AAATGTTTTA AGAAA 205

SEQ ID NO:5991

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07113

SEQUENCE DESCRIPTION:

GATCTTTAGC AGTCTCTTCT AGTTCCCTG GATTTCAGTG ATTTATTANT TAGGGAAAAAT 60  
 GAAAAGAGGA CCTTCTGTG CGCCTGCACT GCTTACTGGT AAATAATAAC AAATTATGC 120  
 TGCCAAA 127

SEQ ID NO:5992

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07114

SEQUENCE DESCRIPTION:

GATCGCTTGA GCCTGGGTAG AGGCTGCTGT GAGCTGAAAT GCGGCNCTG CACTCCAGCC 60  
 TGGGTAACAG AGCGAGNCCC CGACTCAATA AATAAATAAG GATGGATAAA TTGTAGCGTA 120  
 TGCACCATTC ATTATGCTAA GACATTTTAA AGTAATTATG AGAAACGCTC TACTAATGAT 180  
 TTGTTTTTAT TTGTATTTTN CTGCTTATTA GACAAATATA TNCTCATTTT AAAANGGAAA 240

SEQ ID NO:5993

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07115

SEQUENCE DESCRIPTION:

GATCAGAACG AGCTGTTAGA ATTGAGAGTG CTAGAACTCG AAGTAAGAGA CTCTATCTGT 60  
 TGTAAGTCT CAAACGGAGC AGACATTCTC TTTGAACCCA AACTGAAATT CATGTAAAGC 120  
 TCTCAGATGT TTTCAAGCAT GTGTAAAGGG GACATGTTAT AGTTTCTTTC TTTCTTTCTT 180  
 TCTNTNTTTT TTTAAANCTG TATGTNCAGA ATANTTNCNC TGCCTTAATG TGTNCTGGNG 240  
 AGCGTGCTCA CCCAGGNCTN TGGCCATGTN CCAGAGCTAA TATATTTNTT GCCTATGGCT 300  
 TNGTNTGGCA CTTAATGAAT ANTTGTGN 328

SEQ ID NO:5994

SEQUENCE LENGTH:250

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07116

SEQUENCE DESCRIPTION:

GATCTTCAAA ATCCAGGAGG GAACCGAGAT AACACAAGTA CAGGTGTGCA AAATTACTTA 60  
 GTAAACTAT TTNTTCTATT ACTCCTTTT TGCAAGTACA TACATTAAAT GATAANTTNA 120  
 TTGTGAAGTT AATAAANTGC CCATAGCTGT TCTATTACCT TCAGAACTA TTTTCATAAT 180  
 TGANAAANAC TTGGNGTAAG TACATGTGTT ATATANCACC TACCCTAGNT GCTCAAGTGC 240  
 GTNNNGGAGN 250

SEQ ID NO:5995

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07117

SEQUENCE DESCRIPTION:

GATCCTCCTT CCTCAGCTAC TCAGGAGGCT GAGGCAGNG AATGGCATGA ACCCAGGAGG 60  
 CAGAGCTTGC AGGGAGCCAA GATTGTGCCA TGGCACTCCA GCCTCGGCGA CAGAGCAAGA 120  
 CTCCGTCTCA AA 132



SEQ ID NO:5996

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07118

SEQUENCE DESCRIPTION:

GATCCTATAG GGAGGNCATT TCCTGTCCTG GAATTAGTAT TTCTAAAAATG TGNATAAACT 60

TGTTTTATAA AAAGCAAA 78

SEQ ID NO:5997

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07119

SEQUENCE DESCRIPTION:

GATCAGAAAG TGTTATTAA CAGAACTAC ATACATTTT NATGTCTCTC TGGACCCCTT 60

GATTCTAAGT AAATTNCAG TAAGTNAGCA GTAATAGACT ATCCTNTTCA NCTATGAN 118

SEQ ID NO:5998

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07120

SEQUENCE DESCRIPTION:

GATCAAAAAG AGGAACTTG AAATGTGATG GTGTTTATAA TAAAAGATGG TAAAATAAA 60

SEQ ID NO:5999

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07121

SEQUENCE DESCRIPTION:

GATCTCCTTC AGAATTTTG TCTTGACTTT GAATCTTTC CTGTTTGTCT AAACATTGA 60

CTAACATTCT GTTTGAATTT GGAAGTATTC TAATACAAGA TTTGAATAAA GTTTATCCTT 120

AAATAAA 127

SEQ ID NO:6000

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07122

SEQUENCE DESCRIPTION:

GATCCTGGAG CTGGAGCATG AGTGTCTGAC AATCAGAAGC ATGATGTCCA ATGTCNNGAT 60

GGCCAGAATG AATGTAATAG TTCAGACCAA TGCCTGNCCA CTGCTCCTTT ATGACTGCAC 120

TTCTAGCCAG TAGCTCTGCA CAAGTNAGCT CTGTAGAAGT AGGANCTTGG GCTTAAGTCN 180

TGNGCTNTNT CTCCN

195

SEQ ID NO:6001

SEQUENCE LENGTH:156

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07123

SEQUENCE DESCRIPTION:

GATCCCAGCA TGGGGTGAGC ATGAAAGAGT GGCAAACAGA GTGGCATAAG ACAGATAAAA 60  
 TACAAAAGGC AATTACAAA GGACCAGGAC CGCAGAGGCA GAGATAAACC AGTGGGCTCA 120  
 GACTTCTGAG CGTCTCAGAN AAANNNAAN AAANN 156

SEQ ID NO:6002

SEQUENCE LENGTH:177

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07124

SEQUENCE DESCRIPTION:

GATCTGTCTA GCTTATTAAG ATGAAACTG AATTGGAAAA ATAGCTCCAT TTTTGGGTGC 60  
 TTGGGAAGCA CAGTGACCAA AAAAGTTGTA TGGCTGCTTA TTCATTAGTC TTTCTACTG 120  
 ATGTCAAATC CATGGTACCT AGAGTAAAT AAAATTCCAA TGCTCTTACT CTTTAA 177

SEQ ID NO:6003

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07125

SEQUENCE DESCRIPTION:

GATCCAGTTG GGAATAAGT ACATCGTATC GGTTCCTGTT CAGATGACAT GGGGAAGATG 60  
 ATGGTTCAGC CACTGGTACT ACGAGAATGT TTGTATTACC CACATTGAA TTNATTGCT 120  
 ATGATTTTNA TGAAGATTAA AAATATATAC ACAGTTCCTG GTATGTTGAG GTTGTCTTTA 180  
 TTATTCTTAC TCAGAAAGGA AAATTTGTAA ATATGTTTGT GTGGCTCAA CTGATACTAT 240  
 TCTTACANCT GGANCATTGA AAATNCAGAG GGCTGTATTT GGNTATTAGN GAGGNCCTCG 300  
 AATGN 305

SEQ ID NO:6004

SEQUENCE LENGTH:307

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07126

SEQUENCE DESCRIPTION:

GATCCTCAGG CTGGTATACG GCGCAATGTT GCATCAGCTN TGGGCAACTT GGGNCCTGAA 60  
 GGTTTGGGAG AGGAGCTGTT ACAGTGCAGG GTACCCAGC GGCTCCTAGA AATGGCATNT 120  
 GGAGACCCTC AGCCAAATGT GAAGNAGGCT GCCCTCATTG CCCTCCGGAG CCTGCAACAG 180  
 GAGCCTGNCA TCCATCAGGT ACTGGTGTNC CTGGGTGCCA GTGAGAACT ATCCTTGCTC 240

TCTNTGGGGG GNTCAGTCAC TGCCACACAG CAGTNCCTAGG CCTTGNCCTGT GCCAAAACAA 300  
TTGNANN 307

5 SEQ ID NO:6005  
SEQUENCE LENGTH:215  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS07127  
SEQUENCE DESCRIPTION:  
GATCTCTCTC CGGCCCCCTA GAAGCCCTCT CCTCACTGCA GCCCTGGTGC TCTGGGGAAG 60  
GAGGGGCATT GACAGGTGGT TTGACTGTTT ACCCAGCAGC CCCGCTTCCC CACTGGTTTC 120  
TCTCTGGCT GCCGGCGGNG GTAGGCTGGG AAAGCTTCCC CNTCACCTAG GNCGGGCCAG 180  
15 CACCGGCCNG GGNCNNAAGA GGTCNCTNN ATCCN 215

SEQ ID NO:6006  
SEQUENCE LENGTH:273  
SEQUENCE TYPE:nucleic acid  
20 TOPOLOGY:linear  
CLONE:HUMGS07128  
SEQUENCE DESCRIPTION:  
GATCCGAGGG GAAATNTTTA GAGCCCTCAG GAGGAGGAAG AGACCGAGTT TTAGGAAAAA 60  
25 CATCAAAGCT GGATAGGTTG GGCAGAAGAG CTGGGGATAG CATTAGAGA GGCTGAGAGT 120  
CCTGGGTTCT GGNTTATCAC GTGTGAGNGA AACNGGAGGT TGCTANTTGT AGGTGGGCGT 180  
CAGGCTNGA GTGNTGCTTC CAGANGTTTC TGCAAGTGGG CCGGGTCTAA GNTAGGGCAT 240  
GTTACGCCAG ANGTITNAGG GNCCTAGGT AGN 273

30 SEQ ID NO:6007  
SEQUENCE LENGTH:250  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
35 CLONE:HUMGS07129  
SEQUENCE DESCRIPTION:  
GATCACAGGG AAAAACCGAC CGAGCTCAGG AAGCCTAATC CAGGTGGTAA CCACAGAAGG 60  
AAGGACGGAA CTCACCCAG CATATTTTGA GGCCTCATCT CAGTGCCTAT NAGGGGCCGT 120  
CCAGNAAGGT CACTAACCTG GTCTCAGTGT GGCCTGTGCC AGCCTTGTGT TTNCTGTAA 180  
40 CCCCNTTTG TGGTACGAGN TATTGNNTCC TATATTACGG ANACAGANCC NTGNTTTCGG 240  
NTTTGCATN 250

45 SEQ ID NO:6008  
SEQUENCE LENGTH:106  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07130  
SEQUENCE DESCRIPTION:  
50 GATCCAGTN AGTCATGAGC CTCAACCCCC TCCAGCCAC TGGGGCTCTN ACCTCCACAT 60

55

GTGGGTAGAA GCTTNCCTGC CCCCTTTNCC TCCAGGAAGC CCTNAN

106

SEQ ID NO:6009

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07131

SEQUENCE DESCRIPTION:

GATCGCCTGA GCCCATGAGG CCAAGGCTGC AGTGAGCCAT GGTACGCCA CTGNATTCCA 60  
 GCCTGAGTGA CAGAGCAAGA CCCTGTTGAA AACAACAACA ACANCAAA 108

SEQ ID NO:6010

SEQUENCE LENGTH:335

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07132

SEQUENCE DESCRIPTION:

GATCTAAAAC TATTTTCTG TATAAATATT ATTTGCCGAA AGTTTGTTTA TATTNAGAAG 60  
 TCTGACTATG ATGAATAAAT CTAAATGCT TTGTTTAATT GAAAAACAAA AATCACC AAT 120  
 ATCCAAGACA TGAAGATATC AGTTCAACAA ATACTGTAGT TANGNGACTA NCTCTCCACT 180  
 TNTATGGGAA CTACATTTCA CTCCTGGTTT TCAGGATATA GCAGCACTTC ACCGAGATAT 240  
 TCTTTCAGCC ATANCACTGG TAACATTTCT NCTNAATCTN TCTGTAGCAC TTANAGGANT 300  
 TCCCTCATTC GNTNCCTTTC AGTGTNNCG GGNGN 335

SEQ ID NO:6011

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07133

SEQUENCE DESCRIPTION:

GATCCAAAGT AGCTGGGATT ACAGNCATGA TACCACANCA CAGTCATTG AATNTATCAT 60  
 TACTTAGTAC TCNTATTTT TTCCCTGCTG CTCTTTATGC ANTGAAGTCC TN 112

SEQ ID NO:6012

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07134

SEQUENCE DESCRIPTION:

GATCTCCTTT TGATTAAATT ATAGAGTTTT TGATTATATG TCTTTGTATG ANCTTTTATG 60  
 TTATTGCTCA AATATCACAT TTNATATTTA TAACACAGGC TACTGATGTT GACATTTTAA 120  
 CAGTTCAAGT GAAGTGTAGA AATCTTACCC ATTATCCCTC CCTATTAATN NNNTANTGGT 180  
 CTAAATGTC TTTCCCTACA TATATTTNTA ACANGTATAT GAGATAGCCT TACAGTTTTG 240  
 NCTTTAACTA TCAATCATGC ATTAGGNNAC TCAAGNGGN 279

SEQ ID NO:6013

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07135

SEQUENCE DESCRIPTION:

GATCTGGGAC TGGCAGGTTA TTAATCGAGA TACACTTGT AGGAGGGACA GGGTTCCCCT 60  
AAGGCACTTT TAAAGATACT CTGTAAGAAC CATTACAAT AAACCTACTG TCAATCAAA 119

SEQ ID NO:6014

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07136

SEQUENCE DESCRIPTION:

GATCGAGGTT GTTGCACAG ACCGTCTGGG GAAGAAGGTC CGCGTTAAAT GCAACACGGA 60  
TGATACCATC GGGGACCTTA AGAAGCTGAT TGCAGCCCAA ACTGGTACCC GTTGGAAACAA 120  
GATTGTCTCT AAGAAGTGGT ACACGATTTT TGGGGACCAC GTGTCTCTGG GGGACTATGA 180  
AATCCACGAT GGGATGAACC TGGAGCTTTA TTATCAATAG ATGAGAATGC TCATCTTCCT 240  
GNTGNGGGNT TTNCTNTTCG NTNCTGGATN CNCCACACTG GGGNTAGATG CTTGNTTGT 300  
AANNCTTNC CTTN 315

SEQ ID NO:6015

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07137

SEQUENCE DESCRIPTION:

GATCCTAAGT AGAACCAGGT AATTGTCTCT TTTTCTAATA AGGAATTTGG GTAATTTTNA 60  
ATTTTNGTT TTTTAAAAA TAACCTAGAC TATGCAAAAC ATCAAAGTGA ATTTCCCATG 120  
ANTGTTTTTA ATATTCTCAT CTCAACATTG TGATATATGC TACTAAAAAC CTTTNCATAT 180  
ACATCTNACC TCATTTCAGG TGANTNATTN TAATCTNN 218

SEQ ID NO:6016

SEQUENCE LENGTH:53

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07138

SEQUENCE DESCRIPTION:

GATCAGAGCA GAACTAAATN AAATTAGAAT AAAGTTAAAC AATTAAAAAG AAA 53

SEQ ID NO:6017

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07139

SEQUENCE DESCRIPTION:

5 GATCGACTTA TACCTATGCT AAAGTTAACG GTCTGAGAAG GTAGATTAGT GGTGCGCTAG 60  
 GGCTAGGGAG TGGGTTTGGG GGTGGGGAAT AGAAAAGTGAC TGGTCATGGT TATAGGCTTT 120  
 TTTGTAGCAC CATAAAGATA GTTTAAAAAT AGATTGTGGT GGTGATTGCA CCACCCTATG 180  
 ATTTGCATGG TATGTGANTT ATATCTTAAT AAAGCTGTTT AANANGTCAA A 231

10 SEQ ID NO:6018

SEQUENCE LENGTH:380

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07140

15 SEQUENCE DESCRIPTION:

GATCCGCTCC TAACCTGCGA CCGCAGCTGA CCTTCTCCTG CCACTAGCCC GNCCCTGNCC 60  
 TTAACANACG GGATGAAGTT TCCTTTTCTG TCGCGGGCGC TGTTCCATA GGCAGAGCGG 120  
 GTGTNAGACT GAGGATTTCG CTTCCCTCC AAGACGCTGG GGGTCTTGGC TGCTGCCTTA 180  
 CTTNCNNGGG GCTCCTGCTG ACTTCGGAGG GGC GGATGCA GAGCCAGGG NCCCCACCGG 240  
 20 AAGATGTGTA CAGCTGGTCT TTA CTCCATC GGCAGGGCCC GAGCCAGGG ACCAGTGACT 300  
 TNGGCCTGGA CCTNCCGGTC TAACTGCAAG CATCTTCCCC AGGGCAAAGG NTTNTGGGG 360  
 GAACGNGAGG TTTNATNTTN 380

25 SEQ ID NO:6019

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07141

30 SEQUENCE DESCRIPTION:

GATCTATTTT GTGTGTTTG AACTTAGGT GCAATNTCCC CTGGAAAAAG CTAAAGAAAT 60  
 GTATATGTTT AATNACATTT TAAATAAAAA TATTATATAT ATGTAAA 107

35 SEQ ID NO:6020

SEQUENCE LENGTH:52

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07142

40 SEQUENCE DESCRIPTION:

GATCGATTG ATAAAATTAA ACAAAGTGCT TTTAATGGAA AAAAAAAGA AA 52

45 SEQ ID NO:6021

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07143

50 SEQUENCE DESCRIPTION:

GATCCACTGT AATAGTCCAG TTTGGGGTGC AGACAAGTGT GAAGAACTTC TGGAAAAGAC 60

55

5 AGTGA AAAAC TGCTTGCCC TGGCTGTTGA TAAGAAGCTG AAATCCATTG CATTTCATC 120  
 CATCGGCAGC GGCAGGAACG GTTTC AAAA GCAGACAGCA GCTCAGCTGA TTCTGAAGGC 180  
 CATCTCCAGT TACTTCGTGT CTACAATGTC CTCTCCNTC AAAACGGTGT ACTTCGTGCT 240  
 TTTNGACAGC GAGAGTATAG GCATCTNTGT GCAGGANATG GCCAAGCTGN GCGCCGGNN 300  
 NGGCTNGNGC AATGNCAGGA CCNGNTTGCA CCATGGTACC GNACCTTNAG TTTNN 355

10 SEQ ID NO:6022  
 SEQUENCE LENGTH:122  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07144  
 SEQUENCE DESCRIPTION:  
 15 GATCTTGAG CTNCTGGAGA AGCAGGNTG CNAGCTGCTC AACCGNTTC AGGACTAGCC 60  
 CCGCAGGCT CGTGCGCCAC CCGCTCCTGG TGAATAAACG CACTCCCTGT GCCTCAGACA 120  
 AA 122

20 SEQ ID NO:6023  
 SEQUENCE LENGTH:162  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07145  
 25 SEQUENCE DESCRIPTION:  
 GATCCGATAA TGTACCATGT GCCTGCTGGT TTGGCCTGTG CTGTTCTGC TTTTGCCCC 60  
 TNACTTCCTG TGCTAGAGAA AGCCTTATTG GTGTTGGTGG TGGTGATGGG AGGAAAAGG 120  
 GTGGTCCTTT GGGACTCTTG ATAAAAATNT TATCAATTGA AA 162

30 SEQ ID NO:6024  
 SEQUENCE LENGTH:179  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS07146  
 SEQUENCE DESCRIPTION:  
 GATCCAGGCC AATGCATGGC TATTGCTGTA AATCTTGATG TTTATTCTG CCTTGTAAG 60  
 TTCTATCAGC GCCTACCTGG AATTTAAAT TCAGTAGACA AATTAATTGG TCCTCTGCAC 120  
 AACTTTTTTA ATAAGTAGAT TATTTTNC AA NGGNTTNGA NCAANTTNA TTGANTCTN 179

40 SEQ ID NO:6025  
 SEQUENCE LENGTH:403  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 45 CLONE:HUMGS07147  
 SEQUENCE DESCRIPTION:  
 GATCAGAGTG GCTGGAGCAG AGTGAATNAG GAGGGAAGCT GAGTAGCAGG TATCTGAGAA 60  
 GCAATGCAGC CCGCAGCTTA ACTTCAACAT GCTTTAAAC TTTTNCCTA TTCTNTTGAG 120  
 50 TTTCAAGATA TAACCTTGAG GAAACTCAA ATCCTTTCTC CTTAGCCTTA AAATAGACTC 180

55

CACGTCCTC CCCTTTNTCA CCAGATATGC TCCCTTTNCA TTTATCTAAC TGTATGCTAC 240  
 TATTTAATTG TGTGATGTCT TAGANGTTTC AGTGGCTAAT CTTGAGACAG ACCAAGNCTG 300  
 GAGACCCAGC TGGCAANCCT TCCANNATTT ANCTTCAAAA TTGGCTAATT NANCAACCNG 360  
 5 GCCCTTNGTT NNAAAATTATG GTNATTCCGG GGGNCCCGGN TGN 403

SEQ ID NO:6026  
 SEQUENCE LENGTH:198  
 SEQUENCE TYPE:nucleic acid  
 10 TOPOLOGY:linear  
 CLONE:HUMGS07150  
 SEQUENCE DESCRIPTION:  
 GATCTTGCTG CAGCCACAGT GCAGTCCACA TTAAGTCTAC AGACCAAACC ATTGTATCT 60  
 15 GGCATCACTT ACTAACACAC GACATGCAGA AAAGCCGCAT GTNGTGTGTT AGTATACANG 120  
 AAGGAATAGA AAAGTATAC TGTTTTAAAT ANTCTGTAAT TTCAATTTT TTNTTTTNN 180  
 GCTGAANTGG GTCNTNTN 198

SEQ ID NO:6027  
 SEQUENCE LENGTH:190  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07151  
 20 SEQUENCE DESCRIPTION:  
 GATCATAACT CTTTNTTGAA CTAGAGTATT TTTGCAGCAT TCCTTGTCAT CAGAAACATG 60  
 GTTAAAGTTT AAAACTAGAA GCAGCAGAAA ACTAGCTTGT AAAATTTATC CAAGTAGAGT 120  
 GCAGGCTAGG CTGTCTTGGG GAAATAAACA TTAANCTTA AAGCAATGTT TTACATGGAA 180  
 ANNNNANNNN 190  
 30

SEQ ID NO:6028  
 SEQUENCE LENGTH:217  
 SEQUENCE TYPE:nucleic acid  
 35 TOPOLOGY:linear  
 CLONE:HUMGS07152  
 SEQUENCE DESCRIPTION:  
 GATCTTGTGN CATTNTTGAC CTTGGACCTG CTTGGTTAAG GAGGGAGTGG GCCAAACCAG 60  
 AGTGCCAGGA GCTAATGGAG CCAGGCCTGA CTCCTAGGAG TGGTCCAAAG GCCTTCAGCC 120  
 40 TAGATGGTGC AAAGNTGGGG CCAGCCTGTT TTCACCGGNA CCNGNGCCTG TGACACCAAG 180  
 ACCCACCCCA ATCCAGNNT TNACACAGTA TTNTCCN 217

SEQ ID NO:6029  
 SEQUENCE LENGTH:136  
 SEQUENCE TYPE:nucleic acid  
 45 TOPOLOGY:linear  
 CLONE:HUMGS07153  
 SEQUENCE DESCRIPTION:  
 50 GATCGGAGCC TACTTCCCTC CGCTCAGCCT NGAGGAGCTG AGNCCCTACT TCAGGGACCG 60

55



TGGGTGGCCT CTGCCCCGGC CCCTCTAGAC GTGCACCAGA AATAAAGGCG AAGACCCAGC 120  
CCCTCGGCGG CTCAAA 136

5

SEQ ID NO:6030

SEQUENCE LENGTH:278

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS07154

SEQUENCE DESCRIPTION:

GATCCAAACC CAAGTCTTGA GCAATGTTTT TCTCAAAAAG CTGCTATCCA ATNATATAGG 60  
AAAATACATT GTGTTTTCTT AAACACACTT TTCTTTTAA ATGTGCTTCA TTGTTTGATT 120  
TGGTCCTGCC TAAATTCAC AGGCTAGGNC AATGAAGGCT GAATCANNNGN CANTTCATCC 180  
ACCAATATCA TGTGTAGATA TTATGTATAG AAAGTANAGT AANTTATGGC TCTAACTTCT 240  
GTGTTGCTGT NTATCCTTGN TTTTNTCGG GGGTGNTN 278

15

SEQ ID NO:6031

SEQUENCE LENGTH:65

20

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07156

SEQUENCE DESCRIPTION:

25

GATCAGTTGA TGTACACTTG TATTATTAAA GCACTCAATA AATCACTGTG GCTGATAACT 60  
GCAAA 65

SEQ ID NO:6032

SEQUENCE LENGTH:161

30

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07157

SEQUENCE DESCRIPTION:

35

GATCCACATG GCACGGTGAC TGTAGTTAAT GCATTTTATA TGTCAAAATT CCTTANATAG 60  
TAGATTTTAA ATAATCTCAC CACAAAAAAG TAGATGTGTT GGTGATGGAT ATCTTANTTN 120  
GCTTAANGTA NTTGTNTCAC CAATGTATAC ATNTATCAGN N 161

SEQ ID NO:6033

40

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07158

45

SEQUENCE DESCRIPTION:

GATCATCTTT ACAGTTCCTC GGGAAATNT GAATGTCCTG CGTTTTGTTT TCTTTACTGT 60  
ATGAAAACAG GAAAATAAAA GAGAAATTTA GAAAATACAG CTCATTACAA TAAANNNTNT 120  
GGNTTTCAAA 130

50

SEQ ID NO:6034

55

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07160

SEQUENCE DESCRIPTION:

GATCTGGCCC AAGCTGGGCT CCCTNNAAGC CAAGAGAGCC TCTNATNGAC CCCGCCTGCC 60  
CGAATGAAAT CCGAACAGTT GGGGCTGTTC ATGGCAAGTG GGGCTGGTTT TTCAINTCCA 120  
TTGGTTATTT AAAGTTTCCN TAAAAATAAA CGATTTTAAG TAAAA 165

SEQ ID NO:6035

SEQUENCE LENGTH:77

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07161

SEQUENCE DESCRIPTION:

GATCTGGGGT CTGTTTTGTT CATTACTTTG TTCACTCCTT CTTCCATTTA TTCATTCAAT 60  
AAACATTAT TGGGAAA 77

SEQ ID NO:6036

SEQUENCE LENGTH:310

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07162

SEQUENCE DESCRIPTION:

GATCCGGCTT GCCCAGAAAG AGAAGACAGC CATGGAAGTG GAAGCCCCCTT CAAAGCCAGC 60  
CAGGACTAGT GAACCACAGC TCAAAAGGCA AAAGAAGACA AAAGCCCCC AGGATGTAGA 120  
AATGAAGGAC CTTGAAGATG AGAGCTAAAC CTCTTCCACT AGAAGATTCT CAACTGGAGC 180  
CAGCCTTCNG GCTCAGTGGT TGTTTCAGAG GACTTTGACA AAAGCAAGGC CCCTTTTCAC 240  
TCTCCAGATT TCCTCTACC TAATGGCCTA CTGACCTCCC CTTAGAGGGA TGTNTTTGGG 300  
NNGGAAGNTN 310

SEQ ID NO:6037

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07163

SEQUENCE DESCRIPTION:

GATCCAGAAC ACTTCAAGAA CTCGTCAAAC AGCTCGATAA GCCTTTTGA CTGINTACAT 60  
CTGTACCGGG AATAACATTC CTAGGCTGAA ATTTCCACAA AGANTAGAAC CTGTACCCAG 120  
TTCTTCAGGC TGATTTCCCT GACCTCTTGG GCATTTGTAT TTGTAGTAAA GTATTGCAGA 180  
GATTCTAAG TATTTTNNNA GCAGCCATNA AAAATTGGNC TTTGTNTING TTGATTCAATN 240  
NNGAGGGCAA GTTGGGGANT AGACTTCAGT NGANCTCGGT ATGGNTGN 288

SEQ ID NO:6038

SEQUENCE LENGTH:51

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07164

5 SEQUENCE DESCRIPTION:

GATCACGCCA CTGCACTCCA GCCTGGGCAC CAGAGTGAGA CACTGTTTAA A 51

SEQ ID NO:6039

10 SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07165

15 SEQUENCE DESCRIPTION:

GATCTGGGCA GGGAAACATCA CATACCAGGG CTGTCTGTCTG GGGGGGTGGA GGGCTGGGGG 60  
AGGGATAGCA TTAGGGGAAA TACCTAATGT AAATNACAAG TTGATGGGTG CAGCAAACCA 120  
ACATGGCACA TGTATACCTA TGAACAAAT CTGCATGTTG TGCACGTGTA CCCTAGAACT 180  
TAAAGTATAA TTAAG 195

20 SEQ ID NO:6040

SEQUENCE LENGTH:75

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS07166

SEQUENCE DESCRIPTION:

GATCAGGCCC CACCTTGTGT CTACCCCCAT CCCNGCTGTG AACGTGACAN TGAATAAAGT 60  
CGGGGAAACG CGAAA 75

30 SEQ ID NO:6041

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS07167

SEQUENCE DESCRIPTION:

GATCTGAATT GAGGAACTTG TAGTTTTTGC TCTCCCACTT CTTGGAAACC CCTATCTACT 60  
TTCCTATGTA TTTGACTACT TGAGGTAGCT TATACAAGTA GAATCATACA AATGTATTGT 120  
TTTGTGACTA GCTTACTTCA NTTACAATAA GTCCTCAAGT TCTNCCATGT TGCTGTGTGT 180  
GTCAAAATTN CCTTCCTNGC TAAGGCTGAA TAATATTNCA TNGTATATAT ATGNCNTTNA 240  
TCCAGTCATT CATCAATGAN TACNTGTTTT TNGTGTGTGG TGTGGAANC CTNCTGGGGA 300  
CATGGTNATA TTTTN 315

45 SEQ ID NO:6042

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50 CLONE:HUMGS07169

SEQUENCE DESCRIPTION:

55

GATCTAAGCT GATTAAATC TAAAACTGG ATAAGAAGCT GTGGCTTGTA ATAAAAATA 60  
GACCTTTATT CACTAGAAA 79

5 SEQ ID NO:6043  
SEQUENCE LENGTH:189  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS07170  
SEQUENCE DESCRIPTION:  
GATCAGGTAT TTAAGGACA TCTGACAGTG CCTGGCAGG GATAGGTGCT CCATAAATGC 60  
CTGTAGCTAT AATTATTACT GTNCCACTAG CTGTTTACTT AAGTAACATT GAATTTCCAC 120  
AGANTGCATT TCGAATCAGG TGGACTATGA TTATACTGAT TNTNAAAAATA GNGAGCTGCA 180  
15 TCTGTAAAA 189

SEQ ID NO:6044  
SEQUENCE LENGTH:151  
SEQUENCE TYPE:nucleic acid  
20 TOPOLOGY:linear  
CLONE:HUMGS07171  
SEQUENCE DESCRIPTION:  
GATCTGGAGT GGAAGGGGAA TTCATTTGTT CATTGTCTAT CCTTTTGAT TGATTGAATT 60  
25 TTTNATATAT ATATGTAAAT TTNCACAATA AAATTTTTTN CCAAAATAAA ATAAACAAAA 120  
GGGGCTTTTT GCAACCCAAT TCCTATCTAA A 151

SEQ ID NO:6045  
SEQUENCE LENGTH:178  
30 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07173  
SEQUENCE DESCRIPTION:  
35 GATCATAGCA CTNATCATC TAAAAAGTTA ATAATAGATT ACTTGTAACA CAGGCTCACT 60  
ATGNGAGAAT TCATCAAGCT GTATGTACAT TTATTGTGCT CTTCAATTGTA TGTATAANTC 120  
AATAAATTGA AACAGTAAAC GAAAAGGTAA TTNTAGANAN CCTACAGTGA TNCTTGNN 178

SEQ ID NO:6046  
40 SEQUENCE LENGTH:380  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07174  
45 SEQUENCE DESCRIPTION:  
GATCCGTAC AGACTAAGGA GATGGCAGGC ATTGACAGCT TCACTCCATG AAGGCCATCT 60  
CTGTTTCTNT CCTCCGCTTA ACCAAGCTGT TGTGGTTTT NAGCATAGTG TTGTATGTTT 120  
CATTGCTAGC TGTCTGCTG TTTAACACAG TGTGTATTT TTTNCTAAA TGTACATAAT 180  
TAGAAAAGAA GATAACAATA GGANGCTATG TGTATCTCCT GTGTAAAGNA GTGGCTTCAC 240  
50 TGGAAAAATG GTGTGGCTAG CATTTCCTT TGAGTCATGA TGACAGATGG TGTGAAAACC 300

55

ATCTAAGTTT GCTTTTGACC ATCACCTCCC AGTAGCAATT NTGCTTTCAT AATCCNTTTT 360  
AGCANTCCAG GCCTCTTTGN 380

5 SEQ ID NO:6047  
SEQUENCE LENGTH:72  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS07175  
SEQUENCE DESCRIPTION:  
GATCGTAATG TAAAAATTCTT TTACCATGTC AAGAAATTAT TAAAAATACA GGTACTTTGA 60  
CCTCTTTCTA AA 72

15 SEQ ID NO:6048  
SEQUENCE LENGTH:226  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07178  
20 SEQUENCE DESCRIPTION:  
GATCCTGAAA AGATAGGGCT ATTGTCCCTT GCCTCCTTGG TCACTGCCTC TNGCTGCACG 60  
GNCTCCTNAG CCCACCCCTT TGGGGCACAA CCTGCCACTG CCACAGTAGC TCAACCAAGC 120  
AGTTGTGCTG AGAATGGCAC CTGGNGAGAG CCTTCTGTGT GCCAGNTTTT GTTCTGAGTG 180  
25 CTGTACATGT ATTANNTCCT NTACTGCTNG CCACATTGTA CCNNTN 226

SEQ ID NO:6049  
SEQUENCE LENGTH:225  
SEQUENCE TYPE:nucleic acid  
30 TOPOLOGY:linear  
CLONE:HUMGS07179  
SEQUENCE DESCRIPTION:  
GATCCCCGTA CCACAGTGCC AGCCATGCCC TTCCCCTGGG CTACCATGT CCCTTTCCTC 60  
35 ACCCAGTTGG TAGAGGAGTC AGGAGGTGGG AGGCCGTGGG CTTTGGTTTT ATAATGTAAC 120  
CACTGTGGGG GTGGGGGAGG ATGGTGAACC ATGTATTMA GTGAAATATT TAATATATTT 180  
AANTATCANT AAANTCAAAC TCTTTGTAAA ANANANNNAG NANGN 225

40 SEQ ID NO:6050  
SEQUENCE LENGTH:332  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07180  
45 SEQUENCE DESCRIPTION:  
GATCATCCTG GGCAGCAAAG TCATACACTC TTGAGGGAAG AGAGAGACCT TCTCATATTG 60  
TTTTATATTG TTTTATACTC AGTACCTGTT TTAAGAAAAA AACAAGGAAG TGAATCAAA 120  
GACAGGCAGC CCGGCACCAG GCCTGANACC AGCCCTGGGC CTGCNTGGCC TAAACCTAGT 180  
AGTTAAATTT CAACTTACGA CTTAGANCCT GATGTTATCC GTAGATTCCA AGCNTTGTAT 240  
50 AAAANATTTG TGANACTCCC TGTGTGTGTC TGTGCCAGTG CATGNNACCC CTGTCACATA 300

55

TCCCCTAGAT TGCTCANTCA NTCNCGGTTT GN

332

SEQ ID NO:6051

SEQUENCE LENGTH:259

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07181

SEQUENCE DESCRIPTION:

5 GATCACAGGC CTTTGGAGCA CTTTACTCT CTGAGAAGAA CTGGAGCTAG AGATGAAAA 60  
 TGGACAGTCT TGATGGGGTT GAGAACCTTC TGGGGAGCCA GATGACCCTC TCTTGCACA 120  
 ATAGATAAAA GTCTTTATAT GANTATATAT AANTTTNTTT NTTTTCCCT TCCTGTGGGA 180  
 TTTCTGGAGA ATGAGAATTA TCCAAATNCT CAGTCTACCT GNGATAGTAA ATNCATGGCT 240  
 15 TATGCTTCTG GTCCTTAAA 259

SEQ ID NO:6052

SEQUENCE LENGTH:92

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07182

SEQUENCE DESCRIPTION:

20 GATCGNACCA CTGCACTCCA GCCTGGAAGA CCAAACGAGA CTCTGTATCA AAAAATAATA 60  
 25 ATAATTAATA AAGTTTACT GGAAAAAAGA AA 92

SEQ ID NO:6053

SEQUENCE LENGTH:92

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07183

SEQUENCE DESCRIPTION:

30 GATCAGCTAC AATGCCCTGT GTTAAATTNT TAAAAAGTTT CCCTTTTCTT TTTTGCCAAT 60  
 35 AAAGTTGTAA ATAAAGACCA TCATACATTA AA 92

SEQ ID NO:6054

SEQUENCE LENGTH:95

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07185

SEQUENCE DESCRIPTION:

40 GATCCCTTCC CGCCACACGA TGCTCCGTTT TCTTCCGTTG TGAATNCCGC GTCCTGTCCT 60  
 45 GGTGACAGGA GAACAATNTT GGTGAACGTC GCAAA 95

SEQ ID NO:6055

SEQUENCE LENGTH:155

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07186

SEQUENCE DESCRIPTION:

5 GATCTCCTTC TCACTGCATT CACTCGGTC CCATAGCCCA AGTCATATTG TNTCTCTCCT 60  
 GGACAGTAAT AACCTTTTNT TGGGCTCCTT GCTTCCAACC TTGCCTTCTG TAGTGTACTT 120  
 TCCAAATAGA AGCCAGAGTG ATACCTTATA TTAAA 155

SEQ ID NO:6056

SEQUENCE LENGTH:138

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07187

SEQUENCE DESCRIPTION:

15 GATCAGGAGG CCCACTTGGA TTTATAGTAT AGCCCTTCCT CCACTCCAC CAGACTTGCT 60  
 CATTTCCGA GTTTTAACT AGACTACACT CTATTGAGTT TAATTTNTC CTCTAGGATT 120  
 TATTTCTGTT GTCCTAAA 138

SEQ ID NO:6057

20 SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07188

SEQUENCE DESCRIPTION:

25 GATCTGAAAA CCAAGTGGTG ACCTAGGGAG GGAACAAGCN CTGTGCAGCA TTGATGAAAC 80  
 TTTAAAGATG AAGTCCTGGT CCGGGCACGG TGGCTCACTT CTNTAATTCC AACACTTTGG 120  
 GAGGCCGAGG CAGGAAGATG GCTTCANCCC ACGACAAA 158

30 SEQ ID NO:6058

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07192

SEQUENCE DESCRIPTION:

35 GATCTNTGGC CCACTCCGCA TAAATCAGGT GCATAATGTA GCTGCCCGGG CTCTATACT 60  
 GCAACATTG CAAGGCAATT AGCTTGAAAA CTGAATTGAT GTACATTGAT TTTTAAATA 120  
 AAGTTATTGT AATATATTCA CTCGTTATAA A 151

40 SEQ ID NO:6059

SEQUENCE LENGTH:362

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07193

SEQUENCE DESCRIPTION:

45 GATCTATACC CTAAGCAGAT AGCAAAGAAG ATAATGGAGG AGCAATTGGT CATGGCCTTG 60  
 GTTCCCTCA AAACAACGCT GCAGATTNT CTGCACAAAC ATCTCCACTT TTGGGGGAAA 120  
 50 GGTGGGTNGA TTCCAGTTCC CTGGACTACC TTCAGGAGGC ACGAGAGCTG GGAGAAGAGG 180

55

5 CAAAGCTACA GGTTTACTTG GGAGCCAGCT GAGAAGAGAG CAGACTCACA GGTGCTGGTN 240  
 CTGGGTTTNN GCCAGGCTCC TCCGAGCACC TCATGCATGT CCCAGCCCCT GGGCCCTAGC 300  
 CCTTTCNNGN CCTNCNGTCT NCAGTGCCAG NACGGAANTN CCTGNACCA NNGGNTNTTN 360  
 GN 362

10 SEQ ID NO:6060  
 SEQUENCE LENGTH:149  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07194  
 SEQUENCE DESCRIPTION:  
 15 GATCCATCAT NATGTAAAN TTCACAATAT GGTCAAATG TAACANTGCA GAATTGAATA 60  
 TGGAGGCATG CATAACCTTC CTCTTAGAAA ATGGCAGGTN TTGTAATTTC AAATTTTNT 120  
 GCAATTAGAT TAANTCATAA TGCAACAAA 149

20 SEQ ID NO:6061  
 SEQUENCE LENGTH:184  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07195  
 SEQUENCE DESCRIPTION:  
 25 GATCTTGCTT TAACTTTCAA CACTTAGAAA ATCTACAAAC ATTCAGACCT GTCTGGGTTG 60  
 GTATTGCCAC CCATGACATT TAACATGTTG TGATGCTTGA AAACACAGGA GTAGAGAAAN 120  
 TCGATGANGA TTGTATTTTN NCACCTTAAC TCCACATTGC TTTATTGGNT AATTNATANN 180  
 CTNN 184

30 SEQ ID NO:6062  
 SEQUENCE LENGTH:196  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS07196  
 SEQUENCE DESCRIPTION:  
 GATCAGTAGT CTCTATTCAA ACTTTNAAAA TGTCGTGGTA TTGTAACAAT ATATTTAATG 60  
 AAAGANGGTT ACAGACTCCC CTGAAGAACC AGCTTTCCTA CGCTTTTNTAT TTNCTAACT 120  
 40 TGTCTAACCT GATTNAAAA TGACTGCANT TCCAGACTAA AAACATGCTT CANCCCTGTT 180  
 TCANGACATT NTGCTN 196

45 SEQ ID NO:6063  
 SEQUENCE LENGTH:295  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07199  
 SEQUENCE DESCRIPTION:  
 50 GATCCAACT CTACATCCAG AGATTATGAA AAATTCTTAT AGAATTTTGT AACAAATATT 60  
 TACATGTTGG GTGAAAGANA TTTCATAGTC GTTGGAGTGC CATGAAATTA ATACTTGCAA 120

55



TTCAGATTGC GGTAGTTTAC ACTTTTCCTG TATGTTTCAA ATCAGGTGTG TACCAATTGT 180  
 NCTGAGANCA CCACAGANTG ATTTATCCAA AGTCCATTGA TTTTATACG TGTTTTGGTT 240  
 TGTNACCAAN TTATNGTNAT TCNTNGCACA TTTTGGNAA TTNATTGTAT AGGNN 295

SEQ ID NO:6064

SEQUENCE LENGTH:312

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07200

SEQUENCE DESCRIPTION:

GATCTTCGCT GATTNNNTCC ATCAATNACC CGGAGCATCC ACTNACGCTA GAGGAGTTGA 60  
 ACGTAGTAGA GCAGGTGCGG GTTCAGGTTA GCGACCCCGA GAGTACAGTG GCTGTGGCTT 120  
 TCACACCAAC CATTCCGCAC TGCAGCATGG CCACCCTTAT TGGTCTGTCC ATCAAGGTCA 180  
 AGCTTCTGCG CTCCTTCCT CAGCGTTNNN NNGATGGACG TGCACATTAC TCCGGGGACC 240  
 CATGCCTCAG AGCATGCAGT GAACAAGCAN CTTTGCAGNT AAGGNGCGGG TGGCAGCTGC 300  
 CCTNGNGAGC AN 312

SEQ ID NO:6065

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07201

SEQUENCE DESCRIPTION:

GATCAGTGCT CTTCAAGGTG TCAAGATTAT CAAAGACATA AAAGANTGGN TGANCTGCCA 60  
 TAGATTGGNG GAGACAATGC AATGTGAAAT CCTGANTTTG ACCCTGAN 108

SEQ ID NO:6066

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07202

SEQUENCE DESCRIPTION:

GATCTTTAGT CCGAGTATGN GAAATTCAAG CAACTTTGCG AGANAAAGGA ATACTATTTT 60  
 TNAGNCAACA AATTAAGGAA CITGAAAAGC TAAAAANTCA GAN 103

SEQ ID NO:6067

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07204

SEQUENCE DESCRIPTION:

GATCANNGAA ACTAAACATT ACACCTTCTG GNCCTTNATT TATGAAGTGG CACAGAATCT 60  
 AACTTTNCAC TGAATATCTT TCCATTACACA TCTCCTCTGC CTTAGTCACA ATGGCAACAG 120  
 TACAGNN 127

SEQ ID NO:6068

SEQUENCE LENGTH:136

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07206

SEQUENCE DESCRIPTION:

GATCTCCCAA GNAAGCACAA ATAGTTTTTT TCGCTAATT AGTTATGAGT GAAGCCTCTG 60

TNCACCTATA ACTNGCCAGT TTCATTGGTG GAATAAGTCC CCTTACTCAT GATTCANCAA 120

TATNCCTATA TTANAN 136

SEQ ID NO:6069

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07209

SEQUENCE DESCRIPTION:

GATCAGAGAA GGTTTTGGTT GTCTTTTAA TCTTACTTC TTTGAATTGT GAAAGTAATA 60

CTACATATTC ATAATAAATT CAAATAATAC AGAAGTATAT TATGTAAA 108

SEQ ID NO:6070

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07210

SEQUENCE DESCRIPTION:

GATCCGTGCT GTCCAATCCG GTAGCCACAC ACGGCTCTCG GGCACCGCAC AGTGGCTAGT 60

CTGAAACCTG ACATGCTCTA AGTGTAATAT ACATGGTGGA TTTTNAAGAC TTGAACCAAA 120

SEQ ID NO:6071

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07211

SEQUENCE DESCRIPTION:

GATCCTGGCC CTCCACCTNC CTCCAGGCCA CGAAATGGGA ATNCCAGCAC TAAGCCAGGC 60

ACCGGGCAGA AGCTGGGCCT TCCGCCTCCN TTGGATGGGG TCAAGAGGCC ANGCCTGGNA 120

CATTTTGGNG TGTCTGGCT ACCAGCTCTC ACCTACANCC ACGCACCTCT NTAN 174

SEQ ID NO:6072

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07212

SEQUENCE DESCRIPTION:

GATCTAGATA TNAGGTTTTT CTCCTTCATT CTCAGCTGTC GAAGAAATCA AAGTAGCATA 60

TGCACAAGGT TAAAAACCAC ATATACAAAT ACTATAGAAC AGCTTATANT GAAAAACCTTG 120  
 CCTGCCTTTA TANAANNTGT GATTATCTTC TTCTGTTAAT GTCAGTAANN GATGGTTTGT 180  
 CCTAAA 186

5

SEQ ID NO:6073  
 SEQUENCE LENGTH:229  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

10

CLONE:HUMGS07213

SEQUENCE DESCRIPTION:

15

GATCTGAGAG ATGATACATG ATACCAGATG AAAAGAAGGA GAAAGTGTGA CCATATGTTT 60  
 TNAGCAGAGG NCCCTCCAAC TTATGGCATC AGGGGCAAAA AGTCACAGCT TATCCCAGGC 120  
 ACCCTGGCAG GTTCTCAGAG CCTGCCTCCT CCCTGTTTAT ATGCGTACAG CCTGGTAACC 180  
 CCCAGGCATG CAANTATACA GTCTGTAACA ACAGGNNNTT NNTNNNTTN 229

SEQ ID NO:6074

20

SEQUENCE LENGTH:50  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07214

SEQUENCE DESCRIPTION:

25

GATCTTAAAA CTGAATAAAA ATATTTAATA AAACTTTGAA ATATTTTAAA 50

SEQ ID NO:6075

30

SEQUENCE LENGTH:297  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07215

SEQUENCE DESCRIPTION:

35

GATCCATTCT ATCCATCCGT TATGTGGCTT TGCCATCCCA GCTTGGAGTG TCTTTACAAA 60  
 GATAATAACA GTTGTITTCT TTGCTCTCGT TTTGGATGCA TAGACTGAAA AATTAAAAACA 120  
 AATAACTTGT AAAATGGCTT GTNAAAAAAT ACAATTACCT CTAATTAGTA GTACGCGTAA 180  
 NTNTTTTACA GAATGANAGG CGTGCTTTNN ATTCCTTAC TGCCTTACAT TGGTGCGGAA 240  
 AGANGTCTGT ATGANANTCA GTNCTTNTGC TGACACAAGN TCCATTGGT NACANAN 297

40

SEQ ID NO:6076  
 SEQUENCE LENGTH:191  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

45

CLONE:HUMGS07216

SEQUENCE DESCRIPTION:

50

GATCCTCAAT CAGTGGGTGG AGGATAACAG GGTAGATTCA CTTGTTTGCA CTTNTACAGT 60  
 TGTAGCTGCG AGTCCAGAAG TCCTCTAGAG CATGTTTACT GGCAGTGAAG TGGTGAGACA 120  
 GTTGTGGAGT ATCCCATTTCT GATGAGTACA GAAAAAAAAA GAAAAAGAAA NGANGAGAAA 180  
 AANTTANGAA A 191

55

SEQ ID NO:6077

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07217

SEQUENCE DESCRIPTION:

GATCCGAGCG TCGTGAATC ACCTGAACTT TGGAAAGTTG GCACTGGGGG GCCGCATCCC 60  
 CCTGGGAAAT NACTGAACGC GGGGTTTCAN TGGGTCCCGC CTGGGTCTAA GGACCCAGTT 120  
 TCTTCTGTNA GCACGGGCAG TGGGAGGCCG GTGGAAAGGC GCAGGGGCCC ACCTACGCGT 180  
 CTCACATCTT CAGGGGCGCA TTTCTACAAT AAAAATCAC CCAATTAGAC CTAAT 235

SEQ ID NO:6078

SEQUENCE LENGTH:181

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07218

SEQUENCE DESCRIPTION:

GATCTATTGG ACCAAACCTT GTGCACACTC GGCCAGTTCC CTCTCCAATG TCCGGTGCCA 60  
 TCTTTCCTGA CTTTGTGTTT TTTCTGTTCA GGAACCATCA GTCCCCTTGT AATAAAGGTG 120  
 GTAGATTCA TTGAGGTTT AGATTGAAAC TTTGAATAAA TCAAAAATAC TCATTCTTAA 180  
 A 181

SEQ ID NO:6079

SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07219

SEQUENCE DESCRIPTION:

GATCTATCAT TACAAAATNA ATTGAATAAT AAAATAGTTT GGTAGAACT TAAA 54

SEQ ID NO:6080

SEQUENCE LENGTH:225

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07220

SEQUENCE DESCRIPTION:

GATCCAGAGT TGAAGACCCT TCAGCTGGCT CTGCCTGCCA GTGCCACANA GTGCCATGGC 60  
 CCAGGAAGAC AGGTTTNTT CCATCTAGGC CAGGCCATCC AGTGGCCATC CTCCGTGTCC 120  
 TCCCGCCTCC TCCTGGTGTG ACTTCTGAAA ACCAAGAATT TGTTCCTGTT GACTTTTCT 180  
 GTGCTATGGA CCATTGTCCT CTCACCCACT CAATAAATCT TGAAA 225

SEQ ID NO:6081

SEQUENCE LENGTH:291

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07221

SEQUENCE DESCRIPTION:

5 GATCTCTNCT AACNNTAGTA AATAAACT AAAGTGGTGG GCTTTGATAA TGCATTNGT 60  
 GGATACAAAA TCATCGNCTC ATCACTTTCT AGAATGAAAG GCTGGGAGGC ATTGCTCACC 120  
 TTTTGCCTGA AGAAAAGACC TGTCCTTAG AGCCAGTTTT TNCCTAAGGG GAGGACAGAC 180  
 CGTCGTCACC CAGTGGACCN CGTTGGATGG NTGGATGCAG TNCATNCTTT AGAAGCACCG 240  
 10 CATACCTGCT TGTTACAGGT NCAGNGTAAG TGGTCTTNGC TNCCTGTGGGA N 291

SEQ ID NO:6082

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS07222

SEQUENCE DESCRIPTION:

20 GATCTNCCCT AGCCCTCTNT TCCAGAAGAT GCCCTCCAAT CCTTTCCACC CNATTCCCTA 60  
 ACTNTNGGGA CCTCGTTTGG AAGTTTTCTG TGGGCTTGGC CTGGTN 107

SEQ ID NO:6083

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

25 TOPOLOGY:linear

CLONE:HUMGS07223

SEQUENCE DESCRIPTION:

30 GATCTAGTTT TCCAAGTAAC ATTTGTGGT GACAGAAGCC TAAAAAAAAG CTAAATCAG 60  
 GAAAGAAAAG GAAAAATACG ANTTGAAAAAT TAAGGAAATG TTAGTAAANT AGATGAGTGT 120  
 TAANCTAGAT TGTNTTCATT NCTAGATAAN NTGTATAACG CTCTCTGTNC TAN 173

SEQ ID NO:6084

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS07224

SEQUENCE DESCRIPTION:

40 GATCACCTGC GTGTCCCATC TACAGACCTG CGGCTTCATA AAACNCTNA TTTCTCTTCA 60  
 GCTTTGAAAA GGGTTACCCT GGGCACTGGC CTAGAGCCTC ACCTCCTAAT AGACTTAGCC 120  
 CCATGAGTTT GCCATGTTGA GCAGGACTAT TTCTGGCACT TGCAAGTCCC ATGATTTCTT 180  
 CGGTAATTCT GAGGGTGGGG GGAGGGACAT GAAATCATCT TAGCTTAGCT TTCTGTCTGT 240  
 GAAATGTCTA TATAGTGAT TGTGTGTTTT AACAAATGNT TTACACTGAC TGTGCTGTA 300  
 45 AAAGNGAATN TGGGAATAAA GTTATTN 328

SEQ ID NO:6085

SEQUENCE LENGTH:156

SEQUENCE TYPE:nucleic acid

50 TOPOLOGY:linear

55

CLONE:HUMGS07225

SEQUENCE DESCRIPTION:

5 GATCTCAGCT ATTTAAATAC AAAGTTGAAA AAAATATTTT TCCAGGGTAC CATAAATATG 60  
 ATTAANTNNN TAAAAAATTT AGTGTCACTT GATGAAAATA TAACTAGACC AATAGTAAAA 120  
 TNCAGGTGTA TCTTANTTCC CTGANGTCCT CATTN 156

SEQ ID NO:6086

10 SEQUENCE LENGTH:276

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07226

SEQUENCE DESCRIPTION:

15 GATCCTGGGC TGCTGGTGCT ACCTGCGGCT GCAGCGCATC ANCCAGTCGG AGGACGAGGA 60  
 GAGCATCGTG GGGGATGGGG AGACCAAGGA ACCCTTCCTG CTGGTGCACT ATTGGGCCAA 120  
 GGGACCGTGC GTGGAGAGAA AGGCCAAGCT GATGACTCCC AACGGCCCGN AAGTCCACGG 180  
 CTGAGCCAGG ATTCAAGGNT CCTNGTCCTA TTTNCAGCCG GCCAANNNGG GCTNGNAGGG 240  
 20 GNAANCCAT ACGGTTGCGC TNNTGTCTGA GAGGAN 276

SEQ ID NO:6087

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

25 TOPOLOGY:linear

CLONE:HUMGS07227

SEQUENCE DESCRIPTION:

30 GATCTTGCCA CATCTGGCAC GGAGACGACA CAGTAATNCT GAAAAAGCCT CTATGTAGTC 60  
 CTGTTAGTNT CTAAAGAAC CTAAGAAGCTN GGACCAGTAA AATCCACAGA AATCACTCT 120  
 TGCCTTTAAG AACTTTTGAA AACTGTTTAA A 151

SEQ ID NO:6088

SEQUENCE LENGTH:373

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07228

SEQUENCE DESCRIPTION:

40 GATCCAATGG ATTTAAACAG AAGCNCTTTG CCAGGCTTGC CAGCAAGAAG GCAGTGGAGG 60  
 AACTTGCTA CAAATGGAGT GTTGAGGATA TGTAACCTTC CTNAGGCTGT GGGGGTGGCT 120  
 GGNCTGTGGT AGTGGGCATA GGCAGCGAGA TATCCAGTGG TAACAGTTGT CTGTGCTAAT 180  
 AATTGGAGCC CACACAGNCC AGCAGCTTGT TGAATGCCAG TTTTGACCAC AGAAGGTTTA 240  
 TTCGAGGCCT NATGTTTGA CTGAGGTACC TGTACTTCTT NGGGTGTGA CAGCACCAGG 300  
 45 TGTGCTGGN TTTGAGAGG AGCGTTGATT TCTCNTTGAC CAGGGNTTNT TCTTTGGTTA 360  
 GGGTGTCTCT TCN 373

SEQ ID NO:6089

SEQUENCE LENGTH:174

50 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS07229

SEQUENCE DESCRIPTION:

5 GATCAGNAGA GGCCANGCTC CNCCCCACCC CAAACAGCAT GAACTTCCCA AGGCTCCATC 60  
 CCTTTCTCCC AGTGCACAGG CTGGTCACTT TCTCCGGGA CCCCCTTGGG TACCTTGGCT 120  
 GTCTCAGTTC TATTAAACCA TTTCCCACT TTTGAGCATT TACTCACAGT TAAA 174

SEQ ID NO:6090

10 SEQUENCE LENGTH:142

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07230

15 SEQUENCE DESCRIPTION:

GATCTCAGAT TTTTTTGA GTTAACATGC CTGACACAGA CATCCTTTCC TCTCACAAGC 60  
 TGTGTGACTT AGTAGATAAA ATACTGCCTT CTGCCTTTGG GACCATGATT AAAAACAAG 120  
 ACAAAAACCA AAAGTCATTA AA 142

20 SEQ ID NO:6091

SEQUENCE LENGTH:139

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS07231

SEQUENCE DESCRIPTION:

GATCACTGGA CATCAAAGAT TCATTGCACT TATGAACAAG GAACCTTCTT TTCAATTCT 60  
 GTGTAATTG CAAGGCTGTA CAATGTGTGC TGATGCAAGC CTTTTTCAGT TCAAGAGAAT 120  
 AAATGTTTAC AANTATAAA 139

30 SEQ ID NO:6092

SEQUENCE LENGTH:230

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS07232

SEQUENCE DESCRIPTION:

40 GATCTATAAA TCAAGAAAAT CCATTGTCAT AACCATTTTT AAAAGTCAAA AATTAAGACA 60  
 TCCTTAATTA AAANGTTTCA AATCTAGACA CTAAATGTGT GTGANTGTAC AAAGAAAACA 120  
 ANCCATTGCT TATNCTGTTA TATACTAGTG NNCCTTTTAN TTTTGCTTGC TGTTTTAAAC 180  
 TTGGACAGTT TGAGGACTTT NGTTGGANCT TCGTATTGTA NGANCTGTTN 230

45 SEQ ID NO:6093

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07235

50 SEQUENCE DESCRIPTION:

GATCGAGGAC TATTCNGTG CTATTCATTCT CTCCATTGCT AAACAGATNA AAAGCGACGG 60

55

TTNCTNCACT AACAGCAGCT GGGAAAGANG TTATGCTTGT TGN

103

SEQ ID NO:6094

SEQUENCE LENGTH:246

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07238

SEQUENCE DESCRIPTION:

GATCCCAAGG ACCTGGAGCC ACGGGCTGCC AACTGCACTC GGGTACTGGT GTGGCATACT 60  
 CGGACAGAGA AGCCCAAGAT GAAGCAGGAG GAGCAGCTGC AGCGGCAGGG CCGGGGCTCA 120  
 GACCCAGCAA TTGAGGTGTG ATGGCGGGCC CACCCCACT ACCACCTCTT TTCAGGCACA 180  
 GACCTTGTGG GACTGGGNCC AGGCCTNCCC AGGATTGTGG GTTTTCCAA AGTCCTTGAC 240  
 CNTTTN 246

SEQ ID NO:6095

SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07241

SEQUENCE DESCRIPTION:

GATCCACCAG CCTCAGCCTC CCAGAGTGCT GGGATTACAG GCGTGAATGT AATNNTTTT 60  
 AAAAAGAAAA ACATGGNTGT AAAGAAAGTA AAGCTTCGTT TTGAACAGTT ATGATGGTAA 120  
 CACANCTCAA NGGTGCAACT AANGCAGTGC TGCANCCN 158

SEQ ID NO:6096

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07243

SEQUENCE DESCRIPTION:

GATCTGTGAC ACTNACATGG CTGTGGTGTG CATACTGTGT AGTTACATAG CCCTTCCAAT 60  
 TCTGGGTCCA TTTGCACTAG CAAATTAAAA TATGCTTTGA TTCATACTTA AA 112

SEQ ID NO:6097

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07244

SEQUENCE DESCRIPTION:

GATCCCAAAC NACTCACTCC TTAAATTCAC ACTTTGCCAC TTAATCCAG TGTGGATGAC 60  
 AGAGCGAGAC CTGCCTCAA A 81

SEQ ID NO:6098

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid



TOPOLOGY:linear  
CLONE:HUMGS07245  
SEQUENCE DESCRIPTION:  
5 GATCAACCTC AACACCTGGC NTCTCANGCC TATATACCGA CATATNCAGC AAACCCTNAT 60  
GNAGGCTACA AAGTACGCGC AAGTACCCAC GTAAC TGACG TTAN 104

SEQ ID NO:6099  
10 SEQUENCE LENGTH:54  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07246  
SEQUENCE DESCRIPTION:  
15 GATCTTTTCT AAATATTATT ACTTGTAAT AAAGTCTATT TTGNTCCCGT GAAA 54

SEQ ID NO:6100  
SEQUENCE LENGTH:133  
SEQUENCE TYPE:nucleic acid  
20 TOPOLOGY:linear  
CLONE:HUMGS07249  
SEQUENCE DESCRIPTION:  
25 GATCTAAATA TGAAAAGTAT GTCCTGCTGA ATTTTCCTGT GNATTGGTGA GCGGACAGAC 60  
TACCTGTAAA CCATGACCTC CTTGCCAAAC GTTAGTTTAA TNAGNTCACT NGTAACCTTT 120  
GAGAATNNTC TGN 133

SEQ ID NO:6101  
30 SEQUENCE LENGTH:104  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07250  
SEQUENCE DESCRIPTION:  
35 GATCGTNCCA CTNACCTCCA GCCTGGGGGN NAGAGCAAGA CCGTGTCTCA AAAACAATTN 60  
AGTCTGAAAC ACAATTGTCC TGAATCTGTC TGAATAAAC TCTN 104

SEQ ID NO:6102  
40 SEQUENCE LENGTH:126  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07251  
SEQUENCE DESCRIPTION:  
45 GATCTCAAAA AAGAAGGAAT TTCTCCTNTN INTCTTGCG TTAATGTAAG ANTACTTTAA 60  
ATCTCTAANC TTCTGAAGTG TTAGAGGTAG AGATGGTCTA GTAAAGATGT GGTAGTAATG 120  
TNTTAN 126

SEQ ID NO:6103  
50 SEQUENCE LENGTH:179

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07253

SEQUENCE DESCRIPTION:

GATCAAGCCA TCGGAGCTGC TAGAGTTCTG TCTGGACTTT CCAGAGACCA AGTNTTCCT 60  
TTTGCTGCCT CTAAGAGGCC TGTGCTGCA GACATGTGAG ACAGCAGGTC TGATGGGGT 120  
GACAAGCTTT NTTTTTTTN CCNAAAGAN TTNCAAATC AATTCAGAT TGNTTTTN 179

SEQ ID NO:6104

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07257

SEQUENCE DESCRIPTION:

GATCAAATTT CANTGGCTTT NGACAGAAAA GAAGGCTCTG GATTTAAGCG GGTGGTCACC 60  
TGTNAGACCA GGTCTACCTT GGGACTGTNA TTAACTGAA TCAGTTATTT CCTTGAAAT 120  
TCACAGTAGT GGGTGGGCCT GTTTAAGGN TCTGACAGAT ACCACGAAAC ATGAAGCACG 180  
TGAACTACA AGACCCCGG GGTCTTCTG AGTGCAAGGC TGAATGGGN CAAGGGCTCC 240  
TCAGGGGNG TGGAGGGNNG CCGGAGNCT TNCNTGGTG TTNCNTTTT TGN 293

SEQ ID NO:6105

SEQUENCE LENGTH:110

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07259

SEQUENCE DESCRIPTION:

GATCCCGTNC GCGCGCTGC CCGAGAGGAA CAATGACAGC TTTGCAGTTC TCCNGGAGTN 60  
CGCTGAGGAG CAGCTGCAAG CCGACCANGT NTTCAATTAC TTCCACAAGN 110

SEQ ID NO:6106

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07261

SEQUENCE DESCRIPTION:

GATCTAGTAC TCCTTGATGA AGAATCGGGG CCTGTAACT TACCTCCAGC ACTAAACAT 60  
CCTCANGANT TACTATAATG TGTCCAAAT ATCACTGCAT ACAATATCTG NNATTGGAAG 120  
TGAAAACTG ACTTTNGTAT AGTATAAAC ACAGGCTTTC ACAANTTTT GTNTNGCTGG 180  
NTN 183

SEQ ID NO:6107

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07263

## SEQUENCE DESCRIPTION:

GATCCTGANG ATGATGATGA TGATGATGAT GAAGAATAAA TGGAAATCAAA ATGCTAGCTT 60  
 NATTTGACAT NAATAAGTAA AATAAGTCAT CATGTNTTCA ACNCTGTAGT TCAGCTGTTT 120  
 ACATTGAATA ATNTN 135

SEQ ID NO:6108

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07264

## SEQUENCE DESCRIPTION:

GATCCTTTCC AGTTTAAGCA GCCAATCAGA CCNCTTCACA TTTCTAAAAA AATGACCTAA 60  
 CTAAAGCACC AGAGCTCGGA GANTTCCAGG GAAGCCAGAT ACCGAGGCGC AAATTTTTTA 120  
 AAAAATAAGA GTCAGAAATA AAAATAAANG GTNTCTGTTG GTCAAGATT AAA 173

SEQ ID NO:6109

SEQUENCE LENGTH:152

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07265

## SEQUENCE DESCRIPTION:

GATCAATTGA AATCAACTGT GTTTGTNTT CTCTATGTCA AAGTTTAGTT TTATATTGAG 60  
 AATGTAACT TATTGCTTGG TATCTNGGGA AAAAACTTT GTAAATAAGN TATAAAGTTT 120  
 CTTTGAGACA GTAAATTAT GATTNCTTGA AA 152

SEQ ID NO:6110

SEQUENCE LENGTH:337

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07266

## SEQUENCE DESCRIPTION:

GATCTGCTCA CCTCGGCCTC CCAAAGCCTC AGCCTCTTAC AGTGTGGGA TTACAGGCGT 60  
 GAGACACTGT GACCCGGGAC GATTTTCAAT CACAGTTTT TGNTACGAGT GGAAAATGCG 120  
 TATTATAAG AATGAAGTAG TACAGACATG ANTNTGTAGA AATCTCTATA ATCCTGCCAT 180  
 CCAAGGTTGG TACCTGTAA TGTGTATATC AGGGATGTGC AATCTTTGG CCTNCCTGTG 240  
 CCACACTTNG AAGAAGAAGA ATCGNCTTGG GCCACGGATA NANTNCACT AACACTAGCA 300  
 ATACCTGGTG NGCTGAAANA GNNAGTTAAT TCNCNTN 337

SEQ ID NO:6111

SEQUENCE LENGTH:76

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07267

## SEQUENCE DESCRIPTION:

GATCCTGTTA ATNAAACCAC AGACACCATA TATCCTTCTG CATCCTTTGG CCAATAAAAG 60

TTGCTGGAGA ACCAAA

78

SEQ ID NO:6112

SEQUENCE LENGTH:176

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07268

SEQUENCE DESCRIPTION:

GATCAAGGAG AGTCACAGCC TTATTAAGG TTTATTAAAC AATANTATAA AANTTTTAAA 60

CCTACTTGAT NTTCCATAAC AAAGCTGATT TAAGCAAAC GCATTTTTC NCAGGAGAAA 120

TAATCATATT CGTAATTCA AANGTTGTAT AAAANTATTT NCTATTGTNG TTCAAN 176

SEQ ID NO:6113

SEQUENCE LENGTH:63

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07269

SEQUENCE DESCRIPTION:

GATCGACACG TGGGGGCGCC TGAGCGAAGA TAACCGTAAT AAATAGTAAC CTAACGGTCC 60

AAA 63

SEQ ID NO:6114

SEQUENCE LENGTH:73

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07270

SEQUENCE DESCRIPTION:

GATCAGNCCT CGCGCAGTGG CTCAAGGCTG TAATCTCAGC ATTTTGGGAG NCCGAGTGAG 60

ACCTTGCTTT AAA 73

SEQ ID NO:6115

SEQUENCE LENGTH:243

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07272

SEQUENCE DESCRIPTION:

GATCTTAAAT ATTCTAAAGT TTGTATTGTG ACTTCCAGTA ATGTAACTA TATGAGGCTA 60

ATCCTCTTTT CCTCCITTTT GTTGTGTAAC CTCATTGGG ATAAGTGTA CTAGTATTAT 120

TTTATTATG TAATAAAAT ATATGTGAAA TAAAGTGTA CTGGTAAAG ACTTGTAAC 180

ATGATAANTA TTAGCAAGTT GCATACAGAN TTAANAGNGN GGNGNGNANG GNGTGNGGTN 240

TGN 243

SEQ ID NO:6116

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07274

SEQUENCE DESCRIPTION:

5 GATCAGAAGT TCAAGGGACC GTGAAAGCCC TCAGAGTCAG CACCTAGTTT CAGACCAAGC 60  
 ACCCTTTTGA ATCCCTGGAT GGCTGAGGGG GCTGAGGCCG GCTCTGACTG GGCAGCTCAG 120  
 CNCCTCCCCC AGAGCCCAGG GTCTTGCACA CCCCTNCCTG TAACCAAGGA ACACTCTGAA 180  
 ATAAAGGTGA ATGGCTAAA 199

10

SEQ ID NO:6117

SEQUENCE LENGTH:283

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS07275

SEQUENCE DESCRIPTION:

20 GATCAAAATA CTAATAAATT ACTCACAGAC TCAGTGTATT TTTNCTTGA GTAAAAGTCC 60  
 AGGATGGGTA ATAGAATACC TGCTGTTGGC TTTTGGAAAA ATTGGTACTG TATGTAGCAA 120  
 AATAATGTGA AACCCATATG CATGGATATT CTTAACAATT TGAAGAAATC GTCACAGCTT 180  
 TCCTGGGTTG TTGAGCCTCT AAGATGGTCT TTTCTCTGTA TGTGATAATA AAGTGTTTAT 240  
 TCTGANCTCT AAAAAAANN NANNGNGGNG NNTGNNGTGG NGN 283

25

SEQ ID NO:6118

SEQUENCE LENGTH:317

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07276

SEQUENCE DESCRIPTION:

30 GATCACAGTT TTACAAATCT TAGTTTTAAA TAAATTATTT CAGTGTGCTG TTAGTCCTCT 60  
 ACAGTCATTT TGGTTTAAAA AGTGACTATT TATTATGGT AGNATATCAA TAATTTATTA 120  
 ATGTTAAAAA ATACTGTGTA TGACATTACA AACCAGANCA GTTCCTGGGG GAGAGGNTTC 180  
 TNATTGATTG GCAGTTCTGA GAGGGCAAGA NGANTGGNAC TTTATNCTTC AAAAGGNGGT 240  
 TTTGGTTTTN CCAGGTACTG CTTATGTNAA TCGTTTATTT TTNTTTCATC AAAGCCTGGC 300  
 35 ANGTNTATGC NTTCAN 317

40

SEQ ID NO:6119

SEQUENCE LENGTH:360

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07277

SEQUENCE DESCRIPTION:

45 GATCGACGAG CTGCTGCAGG AGTTCGAGGA GAAGAGTGGC CGCACCTTTC TGCACACCGT 60  
 CTGCTTCTAC TGAGCCCAGC GCCCGCATGG AGCCGCCTCT GGAGCTTCCT GTTGTTCATA 120  
 CTTTTTCCTT CCTGACATTT GTTTTTACTT ACAGGTGTTT TGCTGGTGAC GGTAGCATT 180  
 CCCAAATAAA CTGTGCATAT GAAATGGGAG AGGAGATGCC AAAACGCCAG ATGAAAGCAA 240  
 TCAAGTTTCT TCTTTTCCAC TTTTACTTAT GAGCGGGATA TTGATTACAN GGNNTTCTT 300  
 50 CTTAACCAG AAAGGAAAGA CANCGGTTTG TGTGCACITC CCGNCATACC TGTGTCTTTN 360

55

SEQ ID NO:6120

SEQUENCE LENGTH:292

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07278

SEQUENCE DESCRIPTION:

GATCGGGAAG ACTGAGTAGG GAAGGCAGGG CTGCCNAGAA GTCTCANAGG CACCTCACGC 60  
CAGCCATCGC GGAGAGCTCA GAGGGCCGTC CCCACCCTGC CTCCTCCCTG CTGCTTTGCA 120  
TTCACCTCCT TGGCCAGAGT CAGGGGACAG GGAGAGAGCT CCACACTGTA ACCACTGGGT 180  
CTGGGNTCCA TCCTGCGCCC AAAGACATCC ACCCAGACCT CATTATTCT TGCTCTATCA 240  
TTCTGTTTCA NTAAAGACAT TTGGAATAAA CGNGCATATC ATAGCCTGGA AA 292

SEQ ID NO:6121

SEQUENCE LENGTH:30

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07279

SEQUENCE DESCRIPTION:

GATCCAATAA ATNTCCTTTT TTGCTTAAA

30

SEQ ID NO:6122

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07280

SEQUENCE DESCRIPTION:

GATCGGGAGA GGGAGGAGAG GCAGTCTCTT GACAAAATAA AGTATTTTTC TTCATTGTG 60  
TTTATTAAAT GAAAAANCAA TCCCATGGTG TCCCTGTTGT GTGGTGGACC TAATGNCTGT 120  
TGAAATAAAG TTCTGTGTTT TCCCTGAAA 149

SEQ ID NO:6123

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07281

SEQUENCE DESCRIPTION:

GATCCACCAA TGAATTAGA TGGGTAGAGT TGGGTTCTTG AGTTTTACCA CCACTTGTG 60  
CCCACTGAAT TTTGTAACCT GCTGTGTTG CATCCTCTGT TCCTATTCTG CCCTTGCTCT 120  
GTGTCATCTC AGTCATTGA CTTAGAAAGT GCCCTTCAAA AGGGGCCTGT TCACTGCTGC 180  
ACTTTTCAAT GAATTAAAT TTATTTCTGT NCTAAA 216

SEQ ID NO:6124

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07282

SEQUENCE DESCRIPTION:

5 GATCTCATCA ACCCTTTGAA ATGTTCTGGG CAGCACAGCT CCTTGGTCTG CATGGTTGGT 60  
 GTAAGTATAA TCANGTAGTG AAATTGTATG GTATATACCT ATATGCCANC AGTGTACACC 120  
 CGTATGTGCA GAATTGCTA NTATAACCAT TTCAATAAAA ACCTATTGAA AAAGCTGAAA 180  
 AAANNANAAA NGNAGGAGGN GNGGN 205

10

SEQ ID NO:6125

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS07283

SEQUENCE DESCRIPTION:

20 GATCTTTGCC AGGGGTCAAA GCGTCGGGAA GCTTGGGGTC CTTCATCCTG ACGTTATCAC 60  
 CAAATTNAG CTGACCATGC CCTGCTCCTC CTTAGAAATC AATATTGGAC CCTTTTGTG 120  
 AAGATTGGTC TCTGTGGTGT GATTCTCTNC CCAGGTGTCC CTTTCTCCTC CCCTAGTGTC 180  
 CTTAAGTCCT CCTCCACAGG GAACATCTAT TTGGGCTTTG ATGTTTAATA AAGTAGAAAG 240  
 CACTGGNAAA AAAAGAAANN NGNNNTGTGT NTGTTNNNN 279

25

SEQ ID NO:6126

SEQUENCE LENGTH:226

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07284

SEQUENCE DESCRIPTION:

30 GATCCTAAGG AACATAAAGT TAATTAATAA CTTACACCTA ATTATGTAAG TNGCCTTGT 60  
 AAAGACATGT GATTGTATT TNAGATGCTT GTTCTCTATT AAAATACAGA CATTCTACC 120  
 CTCAGTTTCT AAATGTAGAC TATTTGTTGG CTAGTACTTG ATAGATTCCT TGTAAGANAA 180  
 ANTGCTGGGT AATGTNCCTG GTAACANGCC TGTNANTATN TNANGN 226

35

SEQ ID NO:6127

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS07285

SEQUENCE DESCRIPTION:

45 GATCCCATTT AGCCCCTGAA CATAATACCA TCTGCAGTAT TATAAAAGTC ATTTAGAAGG 60  
 TCAGGGGGAT AATCTAGAGG CAGGATTTTG GACATTGTGA AGGAAATGTG CTCCTTCTCA 120  
 GCTCACTTCA ATAACATTTT NCTGAGACTG AAGTTTTTTA GACAAGANTA AGANAACTTT 180  
 GCTTTNTTCA GTTATCACAT GTGANAGCTT TTGCTTTTGG TTAGGAAANG GTGTGGNTGA 240  
 CTCTACTGCG TGGNTGGTTA CATTTTGCTT TCCGTGNAAT TGCTCNGGAA ATGNTCNGGA 300  
 CATNCCNTTT NCCATTTGTG TGTCAGTGCG TATGGTNAN 339

50

SEQ ID NO:6128

55

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07286

SEQUENCE DESCRIPTION:

GATCTCCTAG GACCTAGTGG ACATCTGGNA TTAATTTAAT CTCAGGAAAA ACAAGANATN 60  
 AACCCAGAGA GAGTCTGGGT TCTGGAATTC AGCGTANTAC CTCCAGACCG TGGTGTCTGG 120  
 CCTCCATTTT TGTCTGTNAT TCAGCTCTGA CTTACAGCTG CAGTCACCTT TNCTATAAGG 180  
 CACCTGGGTA GAAGGGTGGA TGGGCTTCAC ATCAAATTTT TTNCTTCCTT TAGGGTGGGG 240  
 NATTGGNTTG GCTNTNTTTT GTNGTGGNN 269

SEQ ID NO:6129

SEQUENCE LENGTH:47

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07287

SEQUENCE DESCRIPTION:

GATCTGTCCT CCAAATCCTC TATTAACCT GATAGCTTGA GCACAAA 47

SEQ ID NO:6130

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07288

SEQUENCE DESCRIPTION:

GATCAGCCCT TCTCAGCCTC CCAAAGTGCT GGGATTACAG NTGTGAGCCA CTGTGCCCCG 60  
 TTCTGTGGCC TTTCTAACA TTATCCAAGN NGCCCTAAGG TTCCTTATGA CAGGTTTGGG 120  
 GATTGGGAAA GTTCAATTTT ATTGTACCGC CAATGAAAAG GTGTATATT TTTTCTTGA 180  
 ACCTNAAGGG CAGAGGCTGA ATTAATCATA TTCCTCAGCT CATTCCACAT TATCATGGCA 240  
 AAGCTCTCTT TTGCTTTATT TATTTATTCT CTNNTATCTT CATACTTAAT CTCATTCCAT 300  
 TCTCTGNCAT GGGCAACCAT NNNAATNGNN 330

SEQ ID NO:6131

SEQUENCE LENGTH:333

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07289

SEQUENCE DESCRIPTION:

GATCTTACAT GAGCATAATC ATCCTTATAC TTCATGAGGG GATTATNAGT ACAATCCCCA 60  
 TTTTACTGTG TTTGAGTTAA AAACCAACA TCCCTGTAAT TTAATTTGAA GATTCTTTAA 120  
 CAGATTGCAG CAAAGTTTAT TATAAACTG TTATGGTGTG TTCAAAGNCT TGATAAAANT 180  
 AACACTGNGA GAGANTTGGT CCATTGTAT GCTGTATTTC TATTACTTGC CAAANGGAAT 240  
 GGGGNTAGGA TTAACCTTGT TTCCATTCTC TTCNCATGGG TATCCATCCC CATGTTTANC 300  
 TGNCCACNCT GGGGGGCTCN GTTGTGTGCT GTN 333



5 SEQ ID NO:6132  
 SEQUENCE LENGTH:21  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07290  
 SEQUENCE DESCRIPTION:  
 GATCATAAAT AAATGTTTAA A 21

10 SEQ ID NO:6133  
 SEQUENCE LENGTH:331  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS07291  
 SEQUENCE DESCRIPTION:  
 GATCATTTTC AAAAATTGCA TTGGGGCCTT CGTTATTTAC CATAGTATTT NCACTTTCAT 60  
 AGTTTTGTCA CCTTTTGTG CTGTGAACAG TTCAACCAGT GACCGACTTC TCTTCATGC 120  
 20 TGTTTACCCC ACACACAATT TCCCACTCAA TTCTGAAAAT AAGAACCCTGT TAATAGGTTG 180  
 GAAAGCTGTG TACTCTATTC ATATATTGTC CTTTCATGCT AGTGGAGAGT GGTGTCATTA 240  
 GCATCTNAAT TTTAGAGTTG TGNAATGATT TTNCCAATTA GGAATTGANT GTGTATTNT 300  
 NTCCTGTTTA ATAAGNNGNG CAAATNTGNT N 331

25 SEQ ID NO:6134  
 SEQUENCE LENGTH:40  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07292  
 30 SEQUENCE DESCRIPTION:  
 GATCTTAAAA CAAATGAAA TAAACGTGAA AAGGAGCAAA 40

35 SEQ ID NO:6135  
 SEQUENCE LENGTH:53  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07293  
 SEQUENCE DESCRIPTION:  
 40 GATCGTGAAT AGTAAGTATC ACTTCCATAA ATAGAAAGTG TCAGAAAAAT AAA 53

45 SEQ ID NO:6136  
 SEQUENCE LENGTH:336  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07294  
 SEQUENCE DESCRIPTION:  
 50 GATCTTGAAG GAGGTAAAAT AAACCTTCAC TGCTCCACTC CAGGTGAATC CGCCCACTCC 60  
 CACTGACCTA GTAGAATTG TAATTTAATA CTTACCTTCT ATTTCTGAAA TCAGTTGTGA 120

55

5 ACTGTTGCCT TATGTTGAGA GGTTTAAAGAA CCTCAGTGAA TTCATTTTTT AAAATCTGCT 180  
 ATTCTGAGAA GCATTGAATG AATTCTTAAC AAGAAGNCTC ATCTGTAGCT GTTTGCTGAC 240  
 TCCTATGAGC CCATAAGGGT TCTGTGCTTA GCATTAAACA ANTAAGGTTT ATAGGGTAAA 300  
 AGCCAATGTA TTANTTTTTT TTTGCATGGG GGGCNN 336

10 SEQ ID NO:6137  
 SEQUENCE LENGTH:235  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07295  
 SEQUENCE DESCRIPTION:  
 15 GATCTAGGAC ACTCATATCC AGGGTGATTG TCTTCATAAG GAGGCATGGG CTGAGTCTCC 60  
 ATTTATAGGG GCTGTCCCA TAGAGACTTC AAGCCACACC TTTCTAGGGA TTCAGGTTGC 120  
 ACATTACCTG ATTCTCACAG TTGATTTGAG CTTGCAAGAC TGTAACCCA TCCCATTATC 180  
 ATGTTTCTT CCTCATTTAC CTACATTTAT CATTAAACCT TTGTGATTCA GCAA 235

20 SEQ ID NO:6138  
 SEQUENCE LENGTH:142  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07296  
 25 SEQUENCE DESCRIPTION:  
 GATCCAGGAT GACTGTACAT CTCAGATAAA GGAGGCTCAG CGCTGGAAGG ACAGCTGGAA 60  
 GCAGTCCCTG CACACTATCC AGGGCCTGTA TGTGTGACCC TCCGCCCCAC CATGAATAAA 120  
 CACTTTCTTA TACAGACTCA AA 142

30 SEQ ID NO:6139  
 SEQUENCE LENGTH:277  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS07297  
 SEQUENCE DESCRIPTION:  
 GATCCGCCAA GCAGGGCAGT ATCTGGGTTA CAGCCACAGC AGGAAGAACC ACTGGAGAGA 60  
 CACTCAGAAG GACTTCCCTG ACATCTGCAC CAAGGAGAGT CTGGACAAAG CTAAGTAAAC 120  
 TCCTCCACCT GCTTCTAAAA TGCCAGAGAAG CCAACTGGAC CNGTTTGGTA TTNGAAGTA 180  
 40 GNGGNTGGN GGCTTTAACC NCCAAAGGGT TCCTGAAGCC CNGGAACCTG GANTNTGGAG 240  
 GGGGTTNNGG CCTTANTTGA GGGTTGGTGG GTTTCNN 277

45 SEQ ID NO:6140  
 SEQUENCE LENGTH:247  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07298  
 SEQUENCE DESCRIPTION:  
 50 GATCAGAAAA CATTGATTTA TATTTAAAAA TAGGATATTG GAGCCATTGT CTTAGATAAT 60

55

TNCAAGGCA AGANCAAGCC TGCAATAAAT AATGAGACTT TGACATTCCT TGGCGAAGAA 120  
 GATGTCTCCT GCCCTAATAT GACTGTCACT CAGCAATTC ANTTTNTGT TTAATTGATT 180  
 TANAANGGGA GGATAANTTG TCCTGANAAG TTTTTTGT TCCTTAACAT TTCANNGTTT 240  
 TCNCTGN 247

SEQ ID NO:6141

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07299

SEQUENCE DESCRIPTION:

GATCCCTGAT GGGATGCCTG AAACCCAAAA TACTCTTAAG TCTTGTATTC TAGGGCCTTC 60  
 TAAGGCAAAA NATTGAGAGA CCCAAAAAGA GAAATATGT TTAGTAAAGA AAATATTTNC 120  
 TTGACTAGT TATGATGGTC ATATAGGGGA GANAAGGCAA ATTTTGNAA TGTAAGATGG 180  
 GGACANTTAA TGTNTATNCN CTGTCCAANT TCAANAGGTA CAACNGAN 228

SEQ ID NO:6142

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07300

SEQUENCE DESCRIPTION:

GATCCACCTG TCTCTTGAAA ATATAAAAAG ACAAACAGG TTGCTTGG CATCAGAGAG 60  
 CACAAAGATT AAAAGTTACT TTAAATTTGC CAATATTTG GGAGANCAAT AAANTACAT 120  
 TTTCCCTCT TCCATACTGG TAGATGCGAA ATTNATCTGT GCATGANAGG GTCACCTCTG 180  
 TNATCGTGCA ACAGNTTTGG TATTANNCCT TNNCTGTGGT TTNCCAN 228

SEQ ID NO:6143

SEQUENCE LENGTH:299

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07301

SEQUENCE DESCRIPTION:

GATCCTCTGA TATACAATTA GAGATATTTT AATATAGNCC CCAAGCATTG TGTGCATAAA 60  
 AGTTAACATT AGGCTGTGGT GCAGTAACCA TTAAATGTCG AGGCTCTATT TCGGAAATAC 120  
 ACTACAAATG TTAAAGTACG TGGCTGTCCT CTTAAGNCAC TAGTAGAGCA AAGCCTTAAT 180  
 CATATCANCT TAATTCTGTT ACACAATATG TGTITTTNAA TATACTANCC ATTTCTNATG 240  
 GAANGGTCCT GTGGGNGGCC CNTCCTCTCG CCANGCCATC ACAGGCTCTG CATAACGN 299

SEQ ID NO:6144

SEQUENCE LENGTH:152

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07302

SEQUENCE DESCRIPTION:

GATCGGGTGC TAGGACAAC T GCAGTCCAAT CCACCAGCTC TCCNTGCCCC TGTGTCTTAT 60  
 TTCAGACATG AGAATAACTG TACAGTGTAA ACTTATAAAG CGTTTTTAAT GGTGTAGAT 120  
 TGGAAATAAA GTATGTCATA TGAACAGCTA AA 152

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SEQ ID NO:6145

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS07303

SEQUENCE DESCRIPTION:

GATCCACCT GCTCAGGCCG TACACCTTAT GGGGAGCCAT TAAGGGGNC TATCTAGGCA 60  
 TTCTGGTAC AGCCAGTGC TCATCCAGC GTATGCTCCN CTCTNTAGNG CAGCCTAAAG 120  
 NGTCAGCCAC N 131

15

SEQ ID NO:6146

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS07304

SEQUENCE DESCRIPTION:

GATCTTCAGA GAAATAAAC TTGAGTGCAG TAGTTTATTT GCGGTTTGGC TCCAGGATGC 60  
 AGGNGTGGGA AAGATGGTAG AGAGCCAGAA GAAAANTCAA TAGAACGGTA TTACGGCGNN 120  
 TGGNTATATA ATNCTTCCCN GAATTGTCTG ACTN 154

25

SEQ ID NO:6147

SEQUENCE LENGTH:251

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS07305

SEQUENCE DESCRIPTION:

GATCCAGTGC TATTCTGTCA CCAACCTAAG AATCCCAATT GCACCTTCTG TTTCTGACAG 60  
 TCACAGGTGA CAGCTGNGGN TCTATAATAC AGACTGGTGT CTTAGAGGTA GGAATAATAC 120  
 ATGATTATNA AGCATACCCC TGCTAATACA TAATAATGTC TTTTATATT ATAAGNGATT 180  
 GAGTTTAGTT CATTNCAATA CATTGTACN TGTAATAANT GCAANGTNGA CCTNNGTAAT 240  
 CNTTTAATCG N 251

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SEQ ID NO:6148

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

45

TOPOLOGY:linear

CLONE:HUMGS07306

SEQUENCE DESCRIPTION:

GATCTCGGAG ACTCNGTCCA TTCTAAGATA CCATGTTTCC ATGACCCCTAC ACACAATAGC 60  
 TACACAGGTG GAGCAACATG AGTCTGAGNA GCTTTGCACA AAAGANGCTT GTTTTCCACA 120  
 AATGNANCTG GGGTGGTTAA CTTCTAATTG TACCCTGTCT TAGCGTTCAG ATGCATTGGT 180

50

55

TCCTTCCCCA ATGTGACCAT CTNNNNATTC NAN

213

SEQ ID NO:6149

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07307

SEQUENCE DESCRIPTION:

GATCAAGATG AATNTAATGT ATAATCAGAA TCCTAGGTAA GTAAACAAAA AAAGGGTTTT 60  
 TTTNAGAATC AAACCTTTGG GGATTGGGTG GTAAAGGGAA ATATTTNTNT NCN 113

SEQ ID NO:6150

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07308

SEQUENCE DESCRIPTION:

GATCTGTGCA TCTGGCCAGC ACTGTGGTGA CATCCTTAGG AATCCATGGG GAGAGAGAAA 60  
 GCATTAGGA GTTAGTGGGT CACGTTGAC AAGGGCCAAT AAAGAAATAT GCAAAGACAA 120  
 AAANCAAGAA GNACATTGTC ATATTNCTA CCTTTTGTIT ATATAAATTT ATNTCANTGA 180  
 TTTTCGCTTN TGTTAATNTG CAATGTATAT NNTATGCTAA CNTTTNCN 228

SEQ ID NO:6151

SEQUENCE LENGTH:42

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07309

SEQUENCE DESCRIPTION:

GATCACAATT GTGGACATTA AAACAGAAAC TGTTACACA AA 42

SEQ ID NO:6152

SEQUENCE LENGTH:311

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07311

SEQUENCE DESCRIPTION:

GATCCAGCTT ATNCTTTAAT TTTCAAGTCC ATTCTTGGGG CTGGTGGGGA GGCAGGAGAA 60  
 TACCCCTCCC TAAGCCCTTA GTGTGTGCCG AGCTTGCTTT GTNATGTTGG CAGGGGAGGG 120  
 GAGACCTGGG TGGTGACTGA GTTCCCTTTA TCAAACCTT CAATGGGCAC AAAATTGAGT 180  
 GCTTGATTTT AGGTTTTTATT TTTTNATGAA TGTCCAAATC TGTGTTTCCC CCTGCCATCC 240  
 CAGACTNTGT GGCCAGTTNA AAAGTGTCTG GNNTGTGTTT ANCTCTNCCC TAANATNCTG 300  
 GAGNAGGGGT N 311

SEQ ID NO:6153

SEQUENCE LENGTH:270

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07312

SEQUENCE DESCRIPTION:

GATCTNNGTG GGTAGCCTCA AGCTGGAGAC ATTGTCTGNC CTCACTGCCC ACTGGGTAGA 60  
 GACACCTGGA TGACATTTCA GTACCCGCTG GCAGCTCCTC CCACTCATCC AGAGACGGCC 120  
 GGTGGGCAGG CGGGGAGAGC AGCTTTCCTT CCCTGGNGAG AACCGTCTTT ACCTCAGCTC 180  
 CTAGGGNCTC CAGCCAACAA AGCTNCAGCA CGGTGACTNG GTGATGGGNG ACCAATNNCA 240  
 GAAGTAAANN GACTGTAGAC CNATATTCN 270

SEQ ID NO:6154

SEQUENCE LENGTH:40

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07313

SEQUENCE DESCRIPTION:

GATCAAATTC TAAAATAAAG TTGCCTGTTG TGACTTTAAA 40

SEQ ID NO:6155

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07315

SEQUENCE DESCRIPTION:

GATCTATACT TAACATATTT AAAATAGTGA TGATTGAAAT AACTGCAAGG TATAGATGNA 60  
 ACTGAAGGT TTCACATTCC TTTTGTGTT ATCATTGGGA ATTTNCTGTA TTTANCTGNC 120  
 TAGAGANCAN 130

SEQ ID NO:6156

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07316

SEQUENCE DESCRIPTION:

GATCATATCA CTCAATGTGG CCATTAATAT TTCTGGAGAA GACACAAACC TATTTATAAT 60  
 ACTTTTNAAG AATCCGAAGT GATAATAAGA NTGTTTTTAC ATTGAAAGTA ATACTTAAGT 120  
 GTTTACATAA CATTCTGTAT GCACTCAAGA AAATAAAGTT TTGTTAATAC AAA 173

SEQ ID NO:6157

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07317

SEQUENCE DESCRIPTION:

GATCTCAGTT ACAGTTTTTT TTTCCTTTTT AATTTCATTA TTTTGGGTTT TTGGTTTTTG 60

5 CAGTCCTATT TATCTGCAGT CGTATTAAGT CCTATTGCTA GAATAGGTGA CTNNANGAAA 120  
 GATTATATTC TGAAAGAAAA ATAAGTACATA TTATATATAA CCAATTAATT TAANGTATTG 180  
 CCATTTAAAT TACACACTGN GAGCATGTCC TATGCAGACA ATAGATTTTN CCTGTNCAAN 240  
 NNNTTNTN 248

10 SEQ ID NO:6158  
 SEQUENCE LENGTH:187  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07318  
 SEQUENCE DESCRIPTION:  
 15 GATCCAGCAG CGCAGGCAGG AGCTGGAGCA GTCGCTGGTT GTNCGCAACA CCTAGGAGCC 60  
 CAAAAATAAG CAGCAGCAGC GAACTTTTCAG CCGTGTCCCG GGGCCCAAGCA TTTTNCCTCG 120  
 GGTCTCCAGCA TCACTCCTCT GCCACCTTGG GGTGTGGGGC TGGATTAAAA GTCATTCATC 180  
 TGACAAA 187

20 SEQ ID NO:6159  
 SEQUENCE LENGTH:21  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07319  
 25 SEQUENCE DESCRIPTION:  
 GATCATAAAT CCCTGTCTAA A 21

30 SEQ ID NO:6160  
 SEQUENCE LENGTH:122  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07320  
 SEQUENCE DESCRIPTION:  
 35 GATCAAACGT GCTTAAGAGC TAACTCGTGA CACTATGCAG TATTGTTTGA AGACCTGTTG 60  
 TTCAACCTCT GTCTCTTTAT GTTAACTGGA TTTCTGCATT AAATGACTGC CCCCTTGTTA 120  
 AA 122

40 SEQ ID NO:6161  
 SEQUENCE LENGTH:125  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07321  
 45 SEQUENCE DESCRIPTION:  
 GATCTCTGAC TCATTGTGGC ATATGAGGTG TAAAAATNTT TCAAAAAAGA ATCTGGTGTG 60  
 TAAACCAAAA TCACACTATG GTGGCATTAA ACCGTTCACT TTTATTCTAA ACNNNANCCA 120  
 NCGCN 125

50 SEQ ID NO:6162

55

SEQUENCE LENGTH:41  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07322  
 SEQUENCE DESCRIPTION:  
 GATCTGTCCA CGACATGGAA AATAAACTGG ATTTTCAGAA A 41

SEQ ID NO:6163  
 SEQUENCE LENGTH:137  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07323  
 SEQUENCE DESCRIPTION:  
 GATCCTATAC GTGAAGGAAC ATATTTAATT TCCTCNCTTT ATATTTCTG GTTAAAAATAT 60  
 CGTCATTATA GTTAGCAATT TGGAATCTGG CTTACATTGG TTGATACAAA TAANTAATAG 120  
 ANTANNGCAA NATCAGN 137

SEQ ID NO:6164  
 SEQUENCE LENGTH:88  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07324  
 SEQUENCE DESCRIPTION:  
 GATCTTTTTT CTATGCGTAA TCAGACATAC ATATATACTG CAGTGTATCT CACGTATTAA 60  
 TTTTAAAAAA TCTTTTGTTT TACTTAAA 88

SEQ ID NO:6165  
 SEQUENCE LENGTH:274  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07325  
 SEQUENCE DESCRIPTION:  
 GATCTCTGTA TTTGTNTTC AACTAACAAC TAATTTNAAA TGTATTGTAT CTTAATNAC 60  
 CTGTNCTCTT AGATTGTNTT TTGCTAGTAA CCCTTACTCA GCCTCTGCCT TTGGGGCTTG 120  
 GACTAATATT GCTTGTATGG AACTACAGTA CTGTGACTAA ACATGGAGCT CAATGCAGCT 180  
 ACTGCTTACA ACTGCTTAAA CTTTGTAGTG TGGACTTCAT TTTTTTCTGT AATAACANCT 240  
 TATTAAATCC TNGGTGGTAT GGCGGTCCTG GAAA 274

SEQ ID NO:6166  
 SEQUENCE LENGTH:310  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07326  
 SEQUENCE DESCRIPTION:  
 GATCATGTTC AGAAAGGGAC TCATTTGGTC CCACTTTGTA ACATGGGAAG AGTAGAAGAG 60



5 AAAATTAAAT GTGGAAATCA TAAATGCTTT TCTAACAGGG TTATGCTATT CTGTAACACT 120  
 AAATGTCTGT CTTTCTCTT AAAAGATTAA GTTTTATTAA TTTTGTCTATA CATTCTCTA 180  
 TTTGANTATA TCTTAACCAT TTTATGTTCC AAATTCGTTT TTTGTCCAAG ACATTCTATC 240  
 AGANTTTTNC TTGCCTCTAT AAATCTGAAA ANTGGGTTCT AGAATGTCCC ACTTGCTGTC 300  
 TCTNAGAGTN 310

10 SEQ ID NO:6167  
 SEQUENCE LENGTH:307  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07327  
 SEQUENCE DESCRIPTION:  
 15 GATCCGCCCA CCTCAGCCTC CCAAAGNGCT GGGATNACAG GCATGAGCCA CTGCACCTGG 60  
 CCTTAACCCC TCTTTAGATT GGAAAAATA NTTACAACTT TAAAAATAGC TTAGTGTGTA 120  
 ACCCTTTGGT AAATAAAGA CCCTTTTATA ATGCACATAT TCCCAACANG GTTAATATAT 180  
 TTNGTGAGAT TAAACAAGGC TTGTATATGC TTGACCTTTC TTAANNTATG TCCATGTCAT 240  
 ACTATTATGA NTGTACATTT TTATGAGTCA TNANTATTNT TTTCAAAANG CGCTNCAGGC 300  
 20 CCNTGAN 307

25 SEQ ID NO:6168  
 SEQUENCE LENGTH:74  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07328  
 SEQUENCE DESCRIPTION:  
 GATCAGAAAA TGTGTGACCT TTTTAAAGTT AAATTGTTAA AAAATTTTAA CTATTAAACA 60  
 30 TTTTAAATAT TAAA 74

35 SEQ ID NO:6169  
 SEQUENCE LENGTH:71  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07329  
 SEQUENCE DESCRIPTION:  
 GATCTCAGAT GCTAGAAATA GTAGACAAAG ATGTTATTTC CCAGTGCAAA TAAAGAAATA 60  
 40 AAGATAGCAA A 71

45 SEQ ID NO:6170  
 SEQUENCE LENGTH:306  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07330  
 SEQUENCE DESCRIPTION:  
 GATCTCAATG TGCAAACTCC TTGGACTCCA GACCCCTGTC TGGTTGGCAC TCCCAGCAGT 60  
 50 GTGTGGTTTC ATCAGGAAAT CCTTGCAGCA GGGGTTTAGA TGGTTCCTTC AGGAGGTGGG 120

55

NAGCCTCCAT AGCATTGAAG GCCAGCCTGC ATCTCGCGGT GTGTGTCCAC TTCTCCNCTC 180  
 ACTTTCCTCC CACCCATCCC TTAAAGTGA TTGGCTGTNA GGNGCACAGA GGGTGGCAAT 240  
 TCCATCTGTN ATGGGNTCAG AAGGCATTNG CCGCCATTNT TGATTNACA TAAAACTGA 300  
 TGNAAN 306

SEQ ID NO:6171

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07331

SEQUENCE DESCRIPTION:

GATCTGTCTG TTGTTGGAAT TGAGATATTA AAATCCCCTA CTATTATAGC GTTCCTCCAG 60  
 TCAAA 65

SEQ ID NO:6172

SEQUENCE LENGTH:33

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07332

SEQUENCE DESCRIPTION:

GATCTTCCAG CACCAAATTT AGATGGCCTC AAA 33

SEQ ID NO:6173

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07333

SEQUENCE DESCRIPTION:

GATCAAATGT GTGAGAAAAT CAATGGGTTT TAAAGACTAT TCTATGTCAA CTATAACATT 60  
 TAATTTGGGG ATTCTGTCC CTTATAATGT CTACCTCATT TTGGATGGAA TCCTTGAGGC 120  
 CTGGTTTATT TTCCTTTNCC TTNCTACACA TCGCTGCTCA GAGTGATGAA TGGAGTTGTG 180  
 TTTTGAATAA AATATCTATG CATCCNTTGG TGAGCAAA 218

SEQ ID NO:6174

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07334

SEQUENCE DESCRIPTION:

GATCATGTTT TAACTAACTT CATTTTGTTG CTGAATCATA ATNNATGCTC TAATGACCTT 60  
 TTCTTTCCTA TCCCAACCTT GTGTAATCTG CTCTATTTAG GGCTAATTGT TCCTTGCTTT 120  
 GTATGTATGT AATGTGTCCT NGTNTTCTTC CTCCTATTNN NTNCTCATAA AACTCCATCC 180  
 NNNTTN 186

SEQ ID NO:6175

SEQUENCE LENGTH:152

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07335

SEQUENCE DESCRIPTION:

GATCCATTCA ACTTGTGTGT ATCAGTAGTT AATTNCTTTG TATTGGTCAG CATTCCATTA 60  
TTTGGAATTT ATACAGTATG TTTATCCATT CACCTGTTGA AGGACATTGT TTCCAATGCT 120  
TATTACTAAT AAAGCTGTTA TGAACATTCA AA 152

SEQ ID NO:6176

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07336

SEQUENCE DESCRIPTION:

GATCTGTATT TAATGAGGAG GAGCCGAGGC CCCAGCTTCA TCCAGCTTCA ACCAATGCCT 60  
GGACCTGTCC ACCTGANAGG CCCCTGGGGC TCCCAGCTG CTGGCCAGAC CCTGGCGCTG 120  
CCACAGTCCT GGCAGTCCC AAGGCCATAC CTGNCCTAGCC CTTGGNTCC ATCCTGTGGA 180  
TGCCCACTCA CCCCTNAGAC TCCTNCTGNC CATGCTGTGG NCGGACTTGT AAGCAN 236

SEQ ID NO:6177

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07337

SEQUENCE DESCRIPTION:

GATCATGCCT GTGTTTACCC TCTAAGCTGA AGCTGCTCAT CAACGGTGAG ATGGCAAAAA 60  
GGTGGGTCCA GAAGAGGGGA AAAGAAGGGA GTCTGTGAAA ACAAATGCT GAAGANTCTG 120  
CATCAAATAA ACCCTTCCTT CCTTCAAA 148

SEQ ID NO:6178

SEQUENCE LENGTH:155

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07338

SEQUENCE DESCRIPTION:

GATCTCCTTA TTGACCACAG ATTATTCCTC TGTCAGCAC TCCTTATTCT TATCCCTGTT 60  
ACAAATCTTA TTATGGTGCA CAAGCTCCAT AAATATTTAT AAAACTGATA TTAATTGANT 120  
AAAAATATTGT CTAGAGGTCT CAGTCATTCT TCAAA 155

SEQ ID NO:6179

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07339

## SEQUENCE DESCRIPTION:

GATCATCTAG ACATAATTNC TGAAGATGAA CTTTGGACC AACTTCTAAG TCACACAGCA 60  
 TCATTATCAG ATTTATTACA CAACGNCCTT TTNGTTTNA CTCTATTTCT GAGGAAAAAG 120  
 CCTTCCCGAA ATCCGTAATG ANTTNTCCA TGGTAACCCC TCTCCTGTTT TNACACAGNA 180  
 AAGTTTCTCT NGA CTGTN 198

SEQ ID NO:6180

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07340

## SEQUENCE DESCRIPTION:

GATCGCTGGT TTCCTCTGCA GCGCGAGGGC TCCGGCGACC AGAGGATTCT NCCCGGAAGG 60  
 CATTCTGCC GCGCTCCNG GGGCACCCCT CAATTGTGTA CTACGTCCTT GTTTAGTGTG 120  
 TATCCGTGCC CACGTAGATG ATGTCTGTAA CGNAGTTTG TTTGAAATAT GAGNATATGC 180  
 GGCTTAAA 188

SEQ ID NO:6181

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07341

## SEQUENCE DESCRIPTION:

GATCAGTTTA TTATTGATAC ATCACTCCAT TAATGTAAAG TCATAGGTCA TTATTGCATA 60  
 TCAGTAATCT CTGGACTTT GTTAAATATT TTNCTGTGGT AATATAGNGA AGAATTAAAG 120  
 CAAGAANNTC TGA 135

SEQ ID NO:6182

SEQUENCE LENGTH:226

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07342

## SEQUENCE DESCRIPTION:

GATCAGTTTT CCNAGTCTTT GGGAAACGGG TTGTGTTTT TNCCCTTTC CGTGTGGAT 60  
 TTCCGGTCCC GGCTGACACC TCCCTTCGTG TGTGCGNCCC TCCCCACCCC TGCCTTTGTN 120  
 TCGGTGCCCT GTGTCCGTT TCTNATGTGG GGATGTTGT GCTGCAGACA AAAAGAACA 180  
 NAAAAANTTT TAAATACCA CAAAGATGGN ANAAAANGAC AAAANN 226

SEQ ID NO:6183

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07343

## SEQUENCE DESCRIPTION:

GATCGTCACA TGCCGGGGAG CAATGTGGAT GGCCTGGGGA CTCCTGGGTT TTCTCCCTCC 60

CGACTCCCTA ATAAACCCCG TGAACCTTGG AGCCAAA

97

SEQ ID NO:6184

SEQUENCE LENGTH:321

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07344

SEQUENCE DESCRIPTION:

GATCACCTTN AGTNCTNAGC AGGGACTAGG CTTGCAGGTA ANATAATGGG CCAGGGCACC 60  
 CAGTCCAGAA GGAGCAATGG CACCTGGGCA GTGCCAGGCC TTAAAGCCCG CTGCTCCTTT 120  
 NCGGTAGAGG AGAGGCCCAT CACTGGTGTG GTGGGGTGGG CTCTCCCTTA GGCTTGGGCA 180  
 AGGCAGCCAC CTGCCCTTNC TCTCCCTTAG TGTCCCTGG CCTCCCTGCC ATCAGGTTGC 240  
 TGGGAGTGA GATGGAGGGA TTATTGAGCA GAAAATNAGT TGGATGGAGN TAAACAGNTC 300  
 CCATCCCTGG GTAATGGATT N 321

SEQ ID NO:6185

SEQUENCE LENGTH:292

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07345

SEQUENCE DESCRIPTION:

GATCAGCTTG GAAGCTTAAA GTCCAATCCT TACTTCGAGT TTGTTTTGAA AGCAAATTAT 60  
 GAATATNATG TTCAGGGACA AATATAACTT TTNCTAAAAA TGGCCATTGT TTATGAAATC 120  
 TGTATAAGTG TGTCTTATA CAAATTTNAG GCCATAAACA AGTGTAAGTT TGTACAATTT 180  
 CATAACATGT ATAGCTGAGT TTTTATACTT TATATGTAGG AAGCTAATAT AAAATAGTTA 240  
 TGTAAGTGTG ATTTTGGTTT TCAGTTATGT GACTTGTTTT TNCCACCNGA AA 292

SEQ ID NO:6186

SEQUENCE LENGTH:155

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07346

SEQUENCE DESCRIPTION:

GATCCATAAC AGAGATNCAN AGAGGCACCG TGGAGTTCCA GGGTCATCGG TCAGCGAGGA 60  
 ACAAGGAGGG AAAGGTGTCT TCCTGCCCCT TGATGCTCAA CTAAGCATCT GTTCCCTAGA 120  
 AATACATGTG TCCAGGNNGN NTCCATGGGC TTTNN 155

SEQ ID NO:6187

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07348

SEQUENCE DESCRIPTION:

GATCTTNAGT TGTTTAAATT TTTTTTTCT GCATCTGAAT CTGCATGATT TCCAAACCCT 60  
 GTACCATCTG AATTTTGCAT TTNAGCACTT GCACTATTAC TCAGCAGCAG TAACATGGTA 120

ACACTTAAAA TGGTACTCGG GGACCTCCAA AGACTAAACT GNCANGCCTT CAAGGNGCCC 180  
 AGGGGTACGT TACTTGTCA ACGCATGGT TTAATCCCTT CTTACACTT GTGTAATTT 240  
 CAGTTACTGG TCATAGNNGG CTTCAATGT TGGGTGGCCT NTTATTANCN TGTATATGGG 300  
 N 301

SEQ ID NO:6188

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07349

SEQUENCE DESCRIPTION:

GATCTTTATC AATATTCTGG ATTAGACAAC AAATNACCTT TCTGGGTGTT TCTTGTAAC 60  
 TATACTCTG TTTGAATGTT AAACCTTTGTT GCTAAAGTTT AATTTAAGA TGTGTAATG 120  
 TNCAGTTTAT GTATTTGANC TACAATAAAC CAACCCCTTT NATATATCTG TNTGTATAT 180  
 GATTATNGTN ACTTAATTNT NAN 203

SEQ ID NO:6189

SEQUENCE LENGTH:316

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07350

SEQUENCE DESCRIPTION:

GATCAAAGCA GGTGGGGCTT TGGGATGTGA AGTGGGTCTT NACGCGGGGC CCCACAGACC 60  
 TGTCTCCGCG TGANTGCCTG CAGGCCCTG CGTCATTCCT CAGCTGCGTG CGAGGCCTCT 120  
 GGCTTGGAGA GCCTCCCGC TGTGCACAGT TCTCTCTTG CCAGGGCAGG GCTTGGGGCA 180  
 GCACCAGGCT GGGGCAGAGG AGGAAAGCAA GAGGACAGAC CTCCAGAAGA GCAGCGGAGG 240  
 GCGGGTGAGG ATTCCCAT ATACCAGTGT GTGTCATCT ACCCATGAGG AATAAAACCA 300  
 TGCAGCAGCA TGCAAA 316

SEQ ID NO:6190

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07351

SEQUENCE DESCRIPTION:

GATCCCCAGN ACTGCAGCG AGCCCCGGGC TTCCTTCTT ACCATTCTGT ATGCTTCCAA 60  
 GGTGTGACCA TTCAAATAA CNNTATTATT AAGATTATTA ATAAAGATT CTTCTTCAA 120  
 ACCAGGAAA 129

SEQ ID NO:6191

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07352

SEQUENCE DESCRIPTION:

5 GATCAGAATC AGAAAAACAGG TAAACCTCAC TCACACATTT GGAATCATT GAACAAAAAT 60  
 CTAGGCCAAA ATACTGAAAA GCCTATGTGT TTTTAAATT GGAAGTATAT GTAAGGTAA 120  
 TGCATTAGT GAACGTGACT AACAAAGACT AATGTGCACA TTAACAGNTG TNCITTTTAA 180  
 GGTTTTATGG GAGGCTGTGC ATTGCTCAAA AGCTGTTGGG AACGCCTTCT GACCAGTTGC 240  
 CTTCAGAACT AGTTTNGCT GCTCANTAA AANCCAGTGN NTTTACTCNN GGN 293

10 SEQ ID NO:6192  
 SEQUENCE LENGTH:52  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07353  
 SEQUENCE DESCRIPTION:  
 15 GATCTGCATG TGTGACACTG ATTCTTTGGA AATAAAGAGT GGAAGCTGCA AA 52

20 SEQ ID NO:6193  
 SEQUENCE LENGTH:236  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07354  
 SEQUENCE DESCRIPTION:  
 25 GATCTAAATT ITAAAAATAG GAATGAATCT NTTAATTGCA GCTTGTGGAG AGTATAAAAC 60  
 ATTTTGAGCA CAATATGCAG CACATAACTT TTCAGATTGT GTTTGCATAG AAAAGGTAA 120  
 AATCAATTCT TTCAGTTACT GTATTGTTCA TTTCTGTAA AGGTCTTCCT ACATTGAGA 180  
 CGAGACCCCT TAACATAGGC TGCCTTAGTA ACAAATAAA ACAGATGTGT CATAAA 236

30 SEQ ID NO:6194  
 SEQUENCE LENGTH:282  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07355  
 SEQUENCE DESCRIPTION:  
 35 GATCTAGAGG GNGGATTTC AGCCAGGGCT GCTAGACGGA GGCCTACTCT TCCATCTTC 60  
 CTGATGGCAG GATGGCCTGG CCAGGGCCTG GAAGACAGAG ACCTCCTGCC TCCGCCTCAG 120  
 TAAGACGACA AGGAAAGGCA AATGCCCAAG GGAAAGAAAA GGAAGGCTCT TCTCCCCAGA 180  
 GTTCCCCATG CAGACATGAG TGCCTGCTCA GTTCAGANTC ACTTCCGAGA ACTCATCCCT 240  
 40 AATGCTGCAG ATTTGGGCTG GAACAGATTC AACTGTCTG TN 282

45 SEQ ID NO:6195  
 SEQUENCE LENGTH:158  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07356  
 SEQUENCE DESCRIPTION:  
 50 GATCTTCATC TCTGTTTGC TCCACTTGTA TTCTCTTTC AGTAACTGGA TTAATGCTTT 60  
 GAGCCCAAAA TGAGATATAT TTNTAATTAC TGTAGATTAC ATGTTGTTTG GCTGGGAATA 120

55

CAATACAATA AACTTTATTT TGCATAATGC ATTTCAAA 158

SEQ ID NO:6196

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07357

SEQUENCE DESCRIPTION:

GATCTGGATT ACTATGTAAA TTCACAGNAG TACCGCTAAT ATAATTTTGG TTGCNTGTAT 60  
TANCATCATC TGGTCTGNAA ATGTGGGTTT TTATTTGGCA CATTANATA AAN 113

SEQ ID NO:6197

SEQUENCE LENGTH:323

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07358

SEQUENCE DESCRIPTION:

GATCTGGAGC CACAGTCTGT NTATCTTCCA GTTCATCTCA GTCCTCGAGA AAGGCCCTNT 60  
AAATATGTAA CTTTCCCAT TNCCTTTAAC CATGGGTTGT GTGAGCCAGA AAGAGCTTTG 120  
AGAAAGATGG CTGCTTCCAC CAGGGNGGAG GCTTCTNGGT CTGCATGATG ATGGGGCCCG 180  
TTTCTGGCCA NAGGGTGGCT CTGGGAGCAG TTGTNCTGCG GGCTTGCTGG GGGCGAACTC 240  
TAACTGTTGC AGAAACAGNG CTTNATGGCT TGCTNNGGGT ACTTAGCTGG AATATTTTAA 300  
AGTGTCAGNT AAATGTGATN TNN 323

SEQ ID NO:6198

SEQUENCE LENGTH:50

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07359

SEQUENCE DESCRIPTION:

GATCTGTATG TACTTTTAGT TGTATTAATA AAGTGACAGT GAGTGTCAAA 50

SEQ ID NO:6199

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07360

SEQUENCE DESCRIPTION:

GATCACCCAG TCTTAAGGTT TCAAAAAC TC TTTGACATTA GATTTACAA CTGCACAATT 60  
GANCTTATTG GCCTGTAACT TATTTNCTAA ATGCTCAGTG CTATTTATAT ACTACAGTAN 120  
TTNCCTGTTA AGNNGGCAGT TGTAAGNN 149

SEQ ID NO:6200

SEQUENCE LENGTH:329

SEQUENCE TYPE:nucleic acid



TOPOLOGY:linear

CLONE:HUMGS07361

SEQUENCE DESCRIPTION:

5 GATCGGACTG GAACTGTTCG GCTGCNACCA GAAATTNATT TTCCTGAGTA AATTGCCGAG 60  
 AATTAAGAAAT GAAGAGGGCC ATTGTCATCT CCTTAAATTA TTCAGTTACC TGCTTTATTG 120  
 CTCCATGTGG AAAACTTAAA ATTGTAAAGT TGTGCATTAC TGTATTTNAN CTTGTTGCTT 180  
 AGTTTCTNCA TGTTTATTN CAGTAATGGC TGANAGTGT AACTGTNCCA TACTTTTNGC 240  
 10 ACAATGTNCT GCATAAGGTT ACCTGTGTAC AGAGTTTAC TTTAGNTTAN CTAAATATT 300  
 GCCTGGGTTC AGNTTNNATT TCCATTNTN 329

SEQ ID NO:6201

SEQUENCE LENGTH:150

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07362

SEQUENCE DESCRIPTION:

20 GATCTAGGAT GTGGNTGTGG AGTACTTAGC ATCGGAACTG CAATNTNAGG AGCAGGGTTG 60  
 TGTGTTGGAT TTAACATAGA TGAAGACGCA TTGGAAATAT TTAATAGGAN TNCAGAAGAG 120  
 TTTGANTTAA CAAATATTGN CATGGTTCAN 150

SEQ ID NO:6202

25 SEQUENCE LENGTH:142

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07363

SEQUENCE DESCRIPTION:

30 GATCCAGGCG CCTGGGCAGA GCACCTGCTG TCTGCCCTGC ACTTTGAAGG GTTGTCTGTTG 60  
 GGATTGAAAT NAACCAACTG CCGGCTGAGC GGAGGCTCCC TGGGAGTNAC AAGTCCGTA 120  
 TTAAATGCT TTCAGTGGNA AA 142

35 SEQ ID NO:6203

SEQUENCE LENGTH:294

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07364

40 SEQUENCE DESCRIPTION:

GATCTATAAA ATTTCAGTTT TAAAAAATGT GTTAAGGCTT TGTTTTTGGC CTAACAGGTG 60  
 GTCTATAAAG AAGNAAGTTG TATGAGGTAA TGAGAAGGCT GTGTATCCTG ATGTTGTCGA 120  
 GGAGTGTCT CTATACCTTC ATTAGAAATA ATTGTNTTTT TACTGCCTTC TAGTCTTCTG 180  
 45 TTTCTTACT AATATNCTCT CTTGTNTTAT TACAGAAAGT GGNGTATTGC AATATCCTAC 240  
 TATAATTGTN TTGCNCTCTT TGTGTTNATC CCAGTNTNNG TNAGTNTANG CTTN 294

SEQ ID NO:6204

SEQUENCE LENGTH:306

50 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS07365

SEQUENCE DESCRIPTION:

5 GATCCCAGCC CGGCCTTGT GGGACTAAGG TGGCGCTGAG TGGGAGAGCA GCAGGCGATG 60  
 CGCGAAAGGC GGGACTTGA GGTCTGGAT GTTCCTGTGG ATAACCTCAA GGAGCACGGN 120  
 ACCTGGGACA TGA CTGCCCC CAGCATTCCT TCTGGCGGCA GACAGNGTTT GTNAGTTCGC 180  
 CAACATCCTG CTTTCATGNG AACAGTTTGC TGTTCGCTNA CAGAGCCTCC AGTNGTATAC 240  
 10 TGAGTTGGTC ACGACCNTNA TTNCTTCGNN CCTACAAACA TATCCCACTT TTCGNTTNTN 300  
 TGGTTN 306

SEQ ID NO:6205

SEQUENCE LENGTH:146

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07366

SEQUENCE DESCRIPTION:

20 GATCTTCAGT AAATATTTTG AAATGAATTC ATTTATGGAA GAATCAAANC TAGGTCAGAT 60  
 TGTCAAACC AGACTAAGAA ACTGCATAGG GTNTTTTATG AGGTNTTTAA TGACTCATCA 120  
 GCNCCATTAT ANCTGANATT NCTACN 146

SEQ ID NO:6206

25 SEQUENCE LENGTH:298

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07367

SEQUENCE DESCRIPTION:

30 GATCTCACTG CCCAGGCTGG TCTTGAATC CTGGCCTCAA GCACTCCTCC TGCCTCACCC 60  
 TCCCAAGCG CTGAGATATA GACCTGAGCC ACAGCGCCTT GCCAGTTGTT TTATGTTCTT 120  
 TATCCTTTTA CCGCTTGCC TTCTGTAACC TGGGTTGCAT TAAATTTACT CCTACTNGTG 180  
 AGTAAATGTG AACCATAGCA ATAAATTTAG TCTATCCCA GAACCTTCAG TAGCAAGGAC 240  
 35 CNATATTNCT ACGGTATTTG TGTGTGCCA NANANAAATA AAATTACCTT NAAAAANN 298

SEQ ID NO:6207

SEQUENCE LENGTH:28

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS07368

SEQUENCE DESCRIPTION:

GATCATTAAA GATAAACATA TTTTAAA 28

45 SEQ ID NO:6208

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50 CLONE:HUMGS07369

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## SEQUENCE DESCRIPTION:

GATCCTGTTG GCAANGGGAA TGTAGAGCTT CCAGGGTGCA TTGCCCCTG TTCTCATTGC 60  
 ATCCCAGTCC TCCAAGTCAG TCTAGCCTTA CTGTACACTT GACAAGTGCT TACTCAGCAA 120  
 GTCCCAGACC CAGNCCTNT TATCTCCNAA GACTGGNTTT GGCCATGNCC TTCCTCATCA 180  
 GGCCTATGCG CANNANTATN TAGGN 205

SEQ ID NO:6209

SEQUENCE LENGTH:302

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07370

## SEQUENCE DESCRIPTION:

GATCCATTTA ATATGTTATC CCCACTAATT AATTTTCGTA TATNATTTCC AATATTTGGA 60  
 AAGCTCTTTA TAGCCATTG GTATTTCCCTA TTACCCACCT CCTATTTTAA ATATTTATCA 120  
 GTCTAAACTT GTGCAGTGTG GTAAACATGC AAGTTGTTAT GCTTGAGCTG TATTACCATA 180  
 AGTNGCNTTT TANGTAAACT GGTGNNTTIG GGCCATAGAT GTTTTGCTT TTTGTTTGAT 240  
 TTTNTNTTNC AGGCTAACTG TTNGNGGTAT ACATNTATTT NTCTGTTGTA CAGATTTGAA 300  
 NN 302

SEQ ID NO:6210

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07371

## SEQUENCE DESCRIPTION:

GATCCCCAC ACCAGCGCCC AAGAAAGGAC CAGCGTTGCA CAGCCCGGTA GAAAGGGTTT 60  
 ATTTATGCGC AACGGTTTAC ACAAGCCTTC CTGAAATTCC ACTTTACAGT AAATAAAGCT 120  
 GTGCGTTTCC CCTTCCCATG CACAACTGCG TATCAATCTA CAACTGTCAT TTAAGTGTGA 180  
 AAAAATAGNG CGTCTCCCTT TTTGTCATCG TTCTGGTAAC ATTTGGCGTA GCATCTGACA 240  
 GCACGGAGNT GCTCACTCCT GGACCGGTTA TTTGGTTAAA ACCCAAAATG TTAGGTCGGA 300  
 N 301

SEQ ID NO:6211

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07372

## SEQUENCE DESCRIPTION:

GATCCATTTA ACTATTCATC AGAGGTGCTG TAATTTTAAA TTGTCTCTTG TCTCCTTCAG 60  
 TTAATTTTCA GAATTAAAAA CATACCATGG GNAAAAAANA CNCNAANCAN N 111

SEQ ID NO:6212

SEQUENCE LENGTH:206

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07373

SEQUENCE DESCRIPTION:

5 GATCCTGGAA ATNAGATGGG CCTTACTCTG TCGACTAAAT GAATAGCTAT TTTCTTGTC 60  
 TTTTAAAG TGCAACTCTT GCTTCATGCT GCTTAAGTTA CCAGATGAAT GCTGNGAAAT 120  
 AAGTAATCAC AGNCAATTTA ATACCATTTC ATTGCTGTTT TACGCGTGTT CATTACTTAA 180  
 CAAAAAATTA TCTTTTAGCT TTTAAA 206

SEQ ID NO:6213

10

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07374

15

SEQUENCE DESCRIPTION:

GATCTAGCCT GCCCTGCCTG CCTGCCCTGG GCGATGAGGT ACGGTGGGGA AGGTGCCTAT 60  
 TTTAGAGAAC TTTGTCACAG TATTAAAGTT CCCAGAACAA A 101

SEQ ID NO:6214

20

SEQUENCE LENGTH:252

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07375

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SEQUENCE DESCRIPTION:

30 GATCTAGAAT GTAACTAAAT TGCTTATAAA TGTCAGAGCA TTTTNAAG GTACAGTATA 60  
 TGGGGATTGT NTCGTTTTTC CTAGCAGGGG AACCTTAGTT AATANTAAAA TACTACTTAT 120  
 TTGAGTACT GNTACAGNTT CATTTAAGGC TTGTGTGCAA ATGTGGTCTC ANTCTTTTT 180  
 CCCTCCATGA TTTTCTATG TGCTTCTCT GGCATTCACT GNGGTTTTGG TAAANTAANT 240  
 TGCCNNTTAA NN 252

SEQ ID NO:6215

35

SEQUENCE LENGTH:257

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07376

SEQUENCE DESCRIPTION:

40 GATCAGGAGT ACCTCCCTCA AGAGTCGAGG GNGGTAGATT TCTACACGCA GAGGAGGTGC 60  
 TGA CTCTCA GGGCAGCCA GCAGTGNNT GTTGCTTTN TAAGGGAGGG CCACTAAGAA 120  
 AGTTAGTGA TTGCAAAGTT GGTGCTTG TGGNAGTTAG ANCAGACCAA CATTTTATGC 180  
 CATAACTTTA NGAGTTCCAT AGGTGGCGGC GCAGTTCTTN CGMATCAATG TNAACTTTG 240  
 NGGGGGGTGT TCATTN 257

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SEQ ID NO:6216

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS07377

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## SEQUENCE DESCRIPTION:

GATCAGACAT AACTTAGCA TCTTAATGGA AGAAAAATGA GGGGAAGCTC AATTATGATT 60  
 TATTAAAGAC AATTCTATT ACACCCTCCT TTATGACAAG TGACATTTTA GATGTAAAAG 120  
 TAAAANCCTT ACCATGCCCT TTTTTTTTTT NGTGGGCCTA CCTTNGGGGC NTNAANCCCN 180  
 GGGGNCCN 189

SEQ ID NO:6217

SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07378

## SEQUENCE DESCRIPTION:

GATCTCGCAA TGTCTGCCTT AATATTTTAC AATTAAACCT TTCATATTTA TTATAATTG 60  
 GTAATATTCA TTAATTTTCC TGTCTTTTAA AAGTCTTGAT AGATTGTGCA AAGTATATGT 120  
 NCTTTTCCCT ATGCTGGTTT AGAAGTNCGA NATATCACTT CTAATAGTAA TTATGCTCAA 180  
 NTAGGTACAC ATATACATAC ATNITTCTCT CNCNCTTTAT ATACTTNTGT GCAATTGGCA 240  
 CTTTGTACGT ATGTCATANN NNTGTCATNC CN 272

SEQ ID NO:6218

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07379

## SEQUENCE DESCRIPTION:

GATCCTCGGC CTCCCAAGT GCTGGGATTA TAGGCATGAG CCACCGTGCC CAGNCTAATT 60  
 TCTAATTAAT TAAA 74

SEQ ID NO:6219

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07380

## SEQUENCE DESCRIPTION:

GATCTCGTCT GCTCACCTTA GCTTTCTGCC TTGGCAGCAC GGGCTGCGGA AGAAAGCACG 60  
 CTGGGCCAGG AGGCAGGGGT GCCCAAGCCA CAGGGAGCCC CTGGGGAAGC CTGCTCCATT 120  
 CTTCTGGTGA CCTTGGCGCT CCTTCACTCA TCTCCCTGC CCCCTCAGGA ACTGGTGGCC 180  
 CAGCTTCCAC ACCNNACCT CCCAGTCTCT AGNCTATCCA TCTGTCTGTG TATGGCCTGG 240  
 AGTCACTNCT TCCTCANGCC CCCAGGGNAA NGTGTGCTCA AAATAAAAC CAGNGGNGCTG 300  
 AAA 303

SEQ ID NO:6220

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07381

## SEQUENCE DESCRIPTION:

5 GATCCCCCTT CCCACATCCG TGCTGTGTCA TTGTTGCTCT GCTTCCTTTC AATGTGTCAG 60  
 TGCTTGGGGG GAGGGGAGGA GCACCCCTC AGCCCCCTG AACCTGACCA AAAGCCATGG 120  
 CTGTTGCTCC NNNCTTTGTA TGATGCAAAAT GCTGAAATGT ACAAATCAA CCATGACAAC 180  
 AANGAAAAAG GCCTTGTTACA GCAAA 205

SEQ ID NO:6221

SEQUENCE LENGTH:110

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07382

## SEQUENCE DESCRIPTION:

15 GATCATAAAA ATGAAGGAAA ATGCCCAAGC ATATCCCCAA CCCCTCACCC CACAACCACC 60  
 ACCACCACAC ATAANCAAGT TGCTGACATA NNAGGGGGAC CTTTTNANN 110

SEQ ID NO:6222

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07383

## SEQUENCE DESCRIPTION:

25 GATCGCATCT CATTGTTAAC TCTTTACTGA TATGTTTGTA AATACAGAAG TGAATGTGG 60  
 ACATAAAATA GTTACGCTAT TTGGTTAATG GTACTAGACA ACATGTAATT AATGACATTC 120  
 AAAAATTTAT GGCTAGTGAT ATATATAANG TAAAATTTTC TTGCAGTAA AATATGCCCT 180  
 TNATTATNGN CGGGNGGCTA TANGGNCCA ACAGTTTGTA TGAANTAGC TCCNAATCAT 240  
 ATCTNTNN 248

SEQ ID NO:6223

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07384

## SEQUENCE DESCRIPTION:

35 GATCCCTTTA CACTCTTCAA AAGTGNGAAC CCCAAAGAGT TTTCATGTAT GTGGGTAAAA 60  
 TCTATTGATA TTTTCTGTGA GAATTTAAAA ATTATGTTAA AANAATAAGA NGAATGACTA 120  
 TTTTNC AAAA CAANANATGA GNTGN 145

SEQ ID NO:6224

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07385

## SEQUENCE DESCRIPTION:

45 GATCTGCTTG GTGAAGAGTT CAGGAAAGTA TATCAACAAA GNGTGAANT TTGTGAAGAG 60  
 AAATNNTATC ATCAAAATTG GGTAAAGCAT AGNTTTTTTG TATGTTACCA CTAGATGTCA 120

GCATANCTN

129

SEQ ID NO:6225

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07386

SEQUENCE DESCRIPTION:

GATCAGAAAA CATTGATTTA TATTTTAAAA TAGGATATTG GAGCCATTGT CTTAGATAAT 60

TTTCAAGGCA AGANCAAGCC TGCAATAAAT ANTGAGNCTT TGACATTCTT TGGCGCGGAC 120

GATGTCTCCT GCCCTANTAT GACTGTCAC T CAGCAATTC AATTTTATGN NTACTTGATT 180

TAAANC GGGA GGCTANACTT GNTCTGAAAN GN 212

SEQ ID NO:6226

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07387

SEQUENCE DESCRIPTION:

GATCTTACTG AAGATGATGT TCCAGCAGCA GCGACTTAGC CCCAGGAGCC CAGTTTCAAT 60

GGCCTTGCTG TGTGGTGT T CAAGTGCATT TAAAATGTGT GACACAGNAA CGGCACACTC 120

TTNCACATGC TTTTGNAGTA TTATAANCA CTTTATTACA AATTTGTCTT NGCTATTAGC 180

AAATANAAC TATTATCATT CTTTATTAAC CCACCTNGGC CTTTNNNAAN CCTCN 235

SEQ ID NO:6227

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07388

SEQUENCE DESCRIPTION:

GATCTCACTC TTNCCCAAGC TGGAGTGCCG TGGCAAATC ACAGCTCACT GCAGCCTTGA 60

CCTCCTAGGC TCAAGCAATC CTCCTACCTC AGCCTCCAA GTTGCTGGGC CTGTAGGTGG 120

ACACCANCA T GCCCTGTGA TTTTNAAT TTTTATAG AGTTGAGGC TCGGTATGTT 180

GCCAACCTAG TCTCAAATC CTNGGCTCAC GGCTGTAATC CCCAGCTCTC AGGGAGGNTA 240

AGCGGCGGNN GGNTAGCTTA AGCCNAGGAN TNCGAAGNCC TGNCTTNGGN 290

SEQ ID NO:6228

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07389

SEQUENCE DESCRIPTION:

GATCCATGGG GCCCAGGNC T AGAGGGCATC CGAGGGGCTG GGCCTTGGCC ACAGCCTCTT 60

GGATGATGTC CTGCTCCAC CAGCGAGGCC CTGCTTCTC CCATCAACGA GTCTTGGCCC 120

AGGGGACACT GACCCTCCCN CAGGGAGGAG AGAGGAGTTC CTTCCTTTA AACGAGGGCT 180

TCCACGACCT CTAAGGGGTG GCGNGGAAGG GAGGAGGATG AGAAGATGNA GATTAAATAA 240  
AGGTATGTN 249

5

SEQ ID NO:6229  
SEQUENCE LENGTH:125  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

10

CLONE:HUMGS07390

SEQUENCE DESCRIPTION:

GATCTATCTC AGGGCTTGTT GTAAGAATGA AATGAAGTAT AAAGCCATGT AGAGCTTGTA 60  
GAATATGCCT GGCACCTTGT AAGACCTTAA TANNTGTAA CTATCTAANC ACANAACAA 120  
CCNCN 125

15

SEQ ID NO:6230  
SEQUENCE LENGTH:71  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS07391

SEQUENCE DESCRIPTION:

GATCCTAGTG CTCCTGTCTG GTCAGGGCCT ATCTTTATGT GTTCGTAAA CTTTAAACAA 60  
TGAGNATTAA A 71

25

SEQ ID NO:6231  
SEQUENCE LENGTH:182  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

30

CLONE:HUMGS07392

SEQUENCE DESCRIPTION:

GATCTGAAAA GTTATTAAGT TCAACTCCAC AGAGGTTCTT AGGAGAATGT TAACAGTCCA 60  
GACCTTTTTC ACTACATCAA CCACGGATGA TTGGCATATA AAATCCTACT TAACCTTTAC 120  
ATAACTGCAA TACCAGGAAA CAAATATGTC AATAAAAGGA AACATCATT CATTTTTGA 180  
AA 182

35

SEQ ID NO:6232  
SEQUENCE LENGTH:233  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07393

40

SEQUENCE DESCRIPTION:

GATCCAAAAA ACCATTCAGG CCAAGTNACC CTGACATGTG ACATCTACCT CCCGACCTAC 60  
CACCCCACTG GCTGGTTCCA GAACGTCTCT CACCTAGACC TTGCCTCCCC TCCTCTCCTG 120  
CCCAGCTCTG ACCCTGATGN TTAATAAAG CAGCGACGTG AGGGTCCTGC TTATCCCTGG 180  
TNNGGNNNCA GNTCNATCCT TGCATCANTG GGGAGGACGT GATGNGTGAG GAN 233

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SEQ ID NO:6233

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SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07394

SEQUENCE DESCRIPTION:

GATCAGCCTG TGCCACACTT CGCTCTTGAG GAGCTCAACG GTCTGGCAGG GCAGCAGGAG 60  
GCTTTCTGGG CTCTGGNCTC CACGGATGCG TGGGCAGNGG AATGTGGGCT ATGTAGTCAT 120  
AATAANTTAG GNCACAGAAA AAAAAAANAA AAAANNCN 158

SEQ ID NO:6234

SEQUENCE LENGTH:51

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07395

SEQUENCE DESCRIPTION:

GATCTCTTTT CATTTGTCAA CCTTTTCAGT AAAGCCCTCT GTTACATCAA A 51

SEQ ID NO:6235

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07396

SEQUENCE DESCRIPTION:

GATCAGCGAG AAGGACAAGA AGAANNTTCT GGACAAGTGT CAAGAGGTCA TCTCGTGGCT 60  
GGACGCCAAC ACCTTGGCCG NGAAGGACGA GTTTACGCAC AAGAGGAAGG AGCTGGAGCA 120  
GGTGTGTAAC CCCATCATCA GCGGACTGTA CCAGGGTGCC GNTGGTCCCG GGCCTGGCGG 180  
CTTCGGGGCT CAGGGTCCCA AGGGNGGGTC TGGGTCAGNC CCTNCCATTG AAGGAGGTGG 240  
NTTAGGGGNC TTTGTTCTTT TNGTATGTTT GTCTTTGNGN 280

SEQ ID NO:6236

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07397

SEQUENCE DESCRIPTION:

GATCTAAATA CTGTGTAAA ATATAGAAAA ACGGAGACTC TNATAAGGTT TTTNACCTCT 60  
ACACTTGAAG GTGAGCTCTT ACAAGAAACT AATCAGTGTT TCGTTATTCC ATATCAGTGG 120  
CTTTTACTGT CAACGNTTGT GTAAGCTNAC TTATCTGGCA AACTTTTNCCT TTCCAGAANT 180  
ACTATCTATN TTACTNTNN 199

SEQ ID NO:6237

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07398

## SEQUENCE DESCRIPTION:

GATCCACCCA CCTCGGCCTC CCAGAGTGCT GGAATTACAG NCGTGAGCAC CGCGCCTGGC 60  
 CAAGNAAAAA TTATTAGAAC AAGTGAGGCA TCACACTCCT CTGCCATTCA GTCAAAAGTA 120  
 NGCACCAATT TATTAACACA AACATTACAT AATACATGAT ACAGGCGCAA TCTCGCTACT 180  
 GCTAGCACTA CGNNAATGTT GTTCTTGAC TATAACATTA AACTGTAAAA TACTGACAGT 240  
 GAAATGCACC NATANNGGNN ACCTGTCATC ACNGGGNNN 279

SEQ ID NO:6238

SEQUENCE LENGTH:21

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07399

SEQUENCE DESCRIPTION:

GATCCAAAAA CTAACCTCAA A

21

SEQ ID NO:6239

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07400

SEQUENCE DESCRIPTION:

GATCCAAGTA CTCTCTCTCC TAAAGACACC ACCTTCCTGC CAGCTGTTTG CCCTTAGGCC 60  
 AGTACACAGA ATTAAGTGG GGGAGATGGC AGACGCTTTC TGGGACCTGC CCAAGATATG 120  
 TATTCTCTGA CACTCTTATT TGGTCATAAA ACAATAAATG GTGTCAATTT CAAA 174

SEQ ID NO:6240

SEQUENCE LENGTH:294

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07401

SEQUENCE DESCRIPTION:

GATCTTGAAG AGACCGCTGG CAGCACCAGT ATTCCCAAGA GGAAGAAGTC TACACCCAAG 60  
 GAGGAAACAG TTAATGACCC TGAGGAAACA GGCCACAGAN GTGGCTCCAA GAAAAAGAGG 120  
 AAATTCTCCA AAGAGGAGCC GGTGAGCAGT GGGCCTGAAG CGGCGGTTGG CAAGAGCANC 180  
 TCCAAGAAGA TGCAANAGTT CCATAAAGCA TCCCNAGGAN GNTTAAGAAT GCAAAATGGAC 240  
 CATTCTCTTG GNGGTTNGG NCATACCCAT MAGCCCNAGG TGACATTTCC CNTN 294

SEQ ID NO:6241

SEQUENCE LENGTH:295

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07402

SEQUENCE DESCRIPTION:

GATCTCGCCC TTACCCCGGG GTCTGGTGTA TGCTGTGCTT TCCTCAGCAG TATGGCTCTG 60  
 ACATCTCTTA GATGTCCCAA CTTGAGCTGT TGGGAGATGG TGATATTTTC AACCTACTT 120

CCTAAACATC TGTCTGGGGT TCCTTTAGTC TTGAATGTCT TATGCTCAAT TATTGGTGT 180  
 TGAGCCTCTC TTCCACAAGC GCTCCTCCAT GTTTGGNTAG CAGTTGAAGN GGTGTGTGGG 240  
 TGGGCTNITG GNGTGAGGA TGGAGTNTA AGTGCCNACT NNCNNCTNNN ACCNN 295

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SEQ ID NO:6242  
 SEQUENCE LENGTH:201  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07403

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SEQUENCE DESCRIPTION:  
 GATCTAATCC CTTCAAGGAA GTGATAACAC TGGGAGTGGT AACAAGAGGA GCAGGGAAGC 60  
 AAGGGCCAGC CCCTGGTTCT CCATCCCNAT GTGTTNGAGG GTGGGACCAG NTGGACCTGG 120  
 TCCAGGCCAG GCCTCATTC TCCTGGNCCN GGCAGGGTCA GAGGGNGGAG GGGCNTGGTC 180  
 CAGGNATGGG TCCNTTCAN N 201

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SEQ ID NO:6243  
 SEQUENCE LENGTH:26  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07404  
 SEQUENCE DESCRIPTION:  
 GATCTTGGCA GTTGATAAAA CGTAAA 26

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SEQ ID NO:6244  
 SEQUENCE LENGTH:324  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07405  
 SEQUENCE DESCRIPTION:  
 GATCGNTGCC TGGTTTGTCT TCTCTGTGTC CTGGAGCAAA GCCAGTTCCT AAAACTAAAA 60  
 CTCCATTCTA GTCTTGGGAA GAAAAGTTTC TACTCAGAAC TGGGGAAGGA GTGGAACCTA 120  
 TGACTTGGGC CTCTAGGCTG TCTCTGTCCC CTCAGCTCCC CGACATGCAT TTA CTCTCTG 180  
 CCGTGGGTCT GCAGTCGCTG CAACCTACCC TCTCTCTGCC TCAGCCTTAC ACCCAAGCAG 240  
 TAGGTCTGTG CTCTCCCTGT CTCTAGGTCG NTGAGAGAGG TGCTTTTNTT CATAAAACCT 300  
 TTGGGGTTTG GGATTTCCTC AGAN 324

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SEQ ID NO:6245  
 SEQUENCE LENGTH:256  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07406  
 SEQUENCE DESCRIPTION:  
 GATCCATTCC GGC GCCTTCC TCTCCCAGTC ACCCAGAGGG CCCCACCCC GCGGNCCTT 60  
 TCTTCTCAA ATGCTCTCGG CTCTATACCG TGNCTGGGTC TTTTNTCTNT CTCTCTGCCT 120  
 GGAAGATTCC TTCTTTNCCC TTTTGTCTTG CCCACTACTG TTTACCCTTC AAGTTTCAAG 180

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GTCATGTCAC TGTCTNAGAG AGGTTTTCT GTGNTNGACC TGTTTTNAT CAGGAAGGCT 240  
TGCTNNTTTC CATNAN 256

5 SEQ ID NO:6246

SEQUENCE LENGTH:37

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07407

10 SEQUENCE DESCRIPTION:

GATCATTAAA CCTGGCTTGA GTCTCTGTTT TGGCAAA 37

15 SEQ ID NO:6247

SEQUENCE LENGTH:152

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07408

20 SEQUENCE DESCRIPTION:

GATCAAGNTT GNTCTTCTGT GATATATGGG ATATNATGTT TAAAGACCA TCTTGAATA 60  
CAATTAGAGA ACTTAGTATT TTGATGTAAT AAGACCTATT TTAAGTTTAA TATTCTACTT 120  
TGCAAAANCT TTAATTAANG ATGTTATTAA AA 152

25 SEQ ID NO:6248

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07409

30 SEQUENCE DESCRIPTION:

GATCCTGCAT TAAGAAATTC AAAAATCAGT TAATCATCGT TACATGTTGT AAAAGTTGGA 60  
TACTGACAGT CTCTAATAGT TTATCATCCA ATNGCANGTA ACCTACAATT TAGGCATAA 120  
ACGTTGATGT GTATAANCAAT GNATACAACG CTANTGGCTG GTCACAGTGT TTTCNCAAAC 180  
TACAGNTCAC ACCANGTNTT TCTCCTNTTC CTN 213

35 SEQ ID NO:6249

SEQUENCE LENGTH:274

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS07410

SEQUENCE DESCRIPTION:

GATCTCCTCT TAAGCGGAAA AGAGATTGAC CTTCTAGCAG AGGCAAAGAA TGGAGTCTTC 60  
TGGGGGCAGC TGCAAAGCGT TCTCCCTAGG ACAGATGGAG CCTCCCTTTC CTCATCTACT 120  
CTGTGGGTGG TTTCAGGGCC CACGAGTCAA CATNAGGAGT TGTGCTGGTG GTATGTGTGT 180  
TGGAGGCTGG GCTGGCTGAT TCACAGTGAC GAGGATGTCA CTAATANCAN GTATTGCGAN 240  
TGNTGATACC TAATAANAGN CTTTTTTTCC CAAA 274

50 SEQ ID NO:6250

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07411

SEQUENCE DESCRIPTION:

GATCACCATG CTTGAATGTC CTCTACTGCT GATTCTAACA TCCGTGTCAG TTTTGGACCG 60  
 GTTTCAGTAG ATGGATTTTN CTCCNNGNNA TGGGCCATAC TTTCCTGCAT TCTTTGCATG 120  
 CTCATAATC TTTGATTGGA TGCCAGACAT TGTAATTTT ACCTTGTGG GTATTGGATA 180  
 TTTTGTATT CCTATAAATA TNC TTGNGCT TTGAAA 216

SEQ ID NO:6251

SEQUENCE LENGTH:319

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07412

SEQUENCE DESCRIPTION:

GATCTAATTT TGTATGTGGG AATCTTGCCT TGCCCTGATT TCCAGACCCA TAGGCAGGCT 60  
 TGCAGGCTGT AGCTGGGGAA GACCCACGCG TTATNCTGGT GCCCTGAGCA AGCCCTCCTG 120  
 CTCCACTATT AGGCAGAAGC ACCTGTTCTG CCACAGGAGG CGCTGTCTTT TGCTGGCAGA 180  
 GCTCAGTTTC CCTTAAGGGG AAGTTCCTTA GGATTTAAGG CCTCATGACT ATCTCAAAAC 240  
 CCATGTTTGT TTGCCAATAA AGNAAATAAA TAAACTGTAA AAAANNAANN AACNACCANN 300  
 NAAAAAACAC NAACANCAN 319

SEQ ID NO:6252

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07413

SEQUENCE DESCRIPTION:

GATCTACTGT TTGCATGTAA GAGACCAGGN TATGTAACTC TTATATTTTA AGTGTATACA 60  
 TATTGTGTAT ATAACATATG GATATTAAAA ATGGGGANTT GCACATTTAA A 111

SEQ ID NO:6253

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07414

SEQUENCE DESCRIPTION:

GATCCCAGGA ACTGTGGGCA CCCATTTTNT GTGTCTCCCA GCCNATTTCC ACTCCTAGTT 60  
 TGTCATGGNT ANTTTTTGT CTCCCTGTG TGAGGGGNGC CATCAACN 108

SEQ ID NO:6254

SEQUENCE LENGTH:317

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07415

SEQUENCE DESCRIPTION:

5 GATCACAACC ATCAGCATCA CGGCCACAGC AGCCAGTGTT GGGGCTGCTG GCATCCCCCA 60  
 GCGGGGCTCG GTCACCATGG TCATTGTGCT TACGTCGGTC GGCTTGCCCA CGGAAGACAT 120  
 CACGCTCATC ATTGCCGTGG ACTGGTTCCT TGACCGGCTT CGCACAATGA CCAACGTACT 180  
 GGGGGACTCA ATTGGNGCGG CCGTCATNGA GCACTTGTCT CAGCGGGNGT GGAAGCTTCA 240  
 GGAAGCTGAG CTTACCCTAC ACAGNCTGGG GAAACCCNTA CAAGTCCCTT AATGGNACAG 300  
 10 GACGCAGGGG AGCATAN 317

SEQ ID NO:6255

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS07416

SEQUENCE DESCRIPTION:

20 GATCGAGACC ATCCTGGCTA ACACGGTGCT GCGGGAGATA AACTCCCTT GAAGCAGTGG 60  
 AGTACAATCA AACATCTTGG CTGCTCCTGA AACCNGGTCC CACGNATTTC AGTCCGGCTA 120  
 AGANCGAAGA GCTGGTAAAC CANTAANTTG GGTGGAGGCC GAGAGCTCGG GCGCGCGAGC 180  
 AAGCCTCCGA CGANNTGGTC CCCTGGACCN NCNGGTTN 218

SEQ ID NO:6256

25 SEQUENCE LENGTH:194

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07417

SEQUENCE DESCRIPTION:

30 GATCTNACTC ACAGAGGGAA GAACTTATAA TTCTTCACAG GTCACATAGA AGCATGANAA 60  
 TTTGGGTTC AAGCAAGTAAA TTCTAAATCA GAATCCATAC ATAAAGTGTT TGCAATGTCC 120  
 AGTTATATCT CCATGATATT TNCTTTGTGG AAGTTGATTG TCCTTCCTTA CAATAAATTG 180  
 CTTGANTTGT CAAA 194  
 35

SEQ ID NO:6257

SEQUENCE LENGTH:345

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS07418

SEQUENCE DESCRIPTION:

45 GATCCTGTGT ATTTCCCTGA GTCTTCTAAC ATATGAAAAT TCATATCTAA ATCAACAAGT 60  
 GACTGTAAATC TGGTACTATA AATACTAAAT AAACACTTCT TCATAACACT GTACCAATTG 120  
 AGCTTTTAAA TTTNATTACT TTGCTTTCCT GTCCTTTGCC AACTCTTAAC CTAGTTAATC 180  
 CTAGTNCTGT TGACATTGGA CCAGGCTCAG TAAATAANCG AATGGATTTC CAGCCTTTTT 240  
 TTCCCATCTG TNCCTGCTTT TANGTCCTCT GAATCTGCTT CTTTGCTTNC TGCTGCTTTA 300  
 ATTTTANAG TGNTTTTNGT CAAAACATAG GNTNCAGGGN CTNNN 345  
 50

55 SEQ ID NO:6258

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07419

SEQUENCE DESCRIPTION:

GATCTGGGTT CTAGAGGGCA TGTGATGACT GTAAATGTTT ACTGGGTGGG TAGGGAGTGG 60  
 TATCCAGTGT TCAAGTGCAG AAATCTTTGG CTNGCTACC AGTTCCATAT GATGAGAAAT 120  
 AAACGTTTCG TGAGGTTTTG TTTCATAAAA AGANNNNNAA AANNTCN 167

SEQ ID NO:6259

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07420

SEQUENCE DESCRIPTION:

GATCCACACT TTAAAGAAA TTCCATAAAT GTATATTTTG TATTATGTAT TATTCCTGG 60  
 TCCNAAGAAA ATATGTGAAT TCAGTTCTAA CTNNGGANT GACTGTTTG TTTTCANGTT 120  
 CATTGNAAAN 130

SEQ ID NO:6260

SEQUENCE LENGTH:110

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07421

SEQUENCE DESCRIPTION:

GATCCGAGAT GGCACCATTG TACTCCAGCC TGGGCAACAA GAGCGAAACT CCGTCTCCAG 60  
 ACAAACAAC AAANCAANAA CAAGTGTCCT TATNNGNATG GGTGTGTTTN 110

SEQ ID NO:6261

SEQUENCE LENGTH:310

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07422

SEQUENCE DESCRIPTION:

GATCTGGCTG TCTAGAGGGA TTCTACGACT GCGTGCTGCC GCCTCCCCAA GAGGCATTCA 60  
 GGTTATTGGA GAACTAATCT CATCTCAAGG GGCCAGNCAC CAAGTCCCAA AGCCTACAGA 120  
 CCTCTTTCCG CCAGGCCCTG AAACCTGGCC CCGTGCCAGC AGGATGACAA GCCCCAGGGC 180  
 GNTCCTGATG AATATGGCTT GGAGATGNTG TACAANTTTT TATTNCCCTN TGGNTTTTGA 240  
 GGNATGAAAT GATTTGCACT TTTGAAAACC TGTTAACCGT AGGCCNCTTN GGNCANTGAN 300  
 GNNTGGAAGN 310

SEQ ID NO:6262

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07423

SEQUENCE DESCRIPTION:

5 GATCCACTCG GNCAACCCAA CAGTTTTACC AACCACCCCG GGCTCGGAAC TAATAGGNAA 60  
 AGTAGACTCT TTGTGAAGAA ACGAGCCANT NNCTGGAACA CCCTGGTGGA AACCTGTTGA 120  
 CANGCCCTN 129

SEQ ID NO:6263

SEQUENCE LENGTH:157

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07424

SEQUENCE DESCRIPTION:

15 GATCACTTGA ATGTTAGGNT TCATAGNACT ATACTAATCT TCTCACAAA GGTCTATAAA 60  
 ATACAGTCGT TGAATAAAT TTTGTATCAA ANTGGGGNGG CAAATNGAA GCTTCTCCTT 120  
 AANCTGTATT GATACTGACT TGAATTCTTT TCTANAN 157

SEQ ID NO:6264

20 SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07425

SEQUENCE DESCRIPTION:

25 GATCTCCTTC TTAGCTCAA GGTGTGCTGCA ANTTGGAGCT GAGCTGTCAG TGGAACGNGT 60  
 CCTGGAAATN ATTAAGCAAG GCGTCGTTGC GCTGCCCAAN GACAGACTGA AGAAATTTCC 120  
 AGANTTGAAA TTCAAATATG TGGAAGNGGA GCAGCCCGNG GNGTTTTAT N 171

30 SEQ ID NO:6265

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07426

SEQUENCE DESCRIPTION:

35 GATCCTACAT TTACAGACAG TTTTGTGATA ACCCTTTGCA TTGCAGCACC TAGTACAATT 60  
 CCTTGGAAAC AGCGTGGCTC AATAAATTTT TATTGAATGA ATAAATGTGG GCCCAGAAGC 120  
 GTGCTAGANG AGTGCCTTTC TGGGCTACTN AAAAAANNA AANACNAAN AANN 174

40 SEQ ID NO:6266

SEQUENCE LENGTH:123

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07427

SEQUENCE DESCRIPTION:

45 GATCAAAGAC TCCCTGGAGC GAGAAAACAG TTACTGCCAG AAGCAGAATG GAAGAGCCAA 60  
 AAAGTACACA AAATGGACGC CATAANTTCT GAAATAAAG TGTATGATGT GTTCTGAGTC 120  
 50 AAA 123

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SEQ ID NO:6267

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07429

SEQUENCE DESCRIPTION:

GATCTGGGCC TCAAAATACC ATAGTAGCTG CTTGATAAAA TTCTAAAAAT ATCTGGTTCT 60  
CTATTATGTA AACACTATTA CAGTCACCAG TGTGTGAAGA CTCTTGAGTC TGGTTCTCAT 120  
ATCAGAGTCA TCATTTTCT TCCNGTGGAA TAAANTGCCT TGTGGNCTTC CAAA 174

SEQ ID NO:6268

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07430

SEQUENCE DESCRIPTION:

GATCTTTTCA CTGGCTGACT CTCCCATATC TGCAAGAGAT TCTGCAGGAA CTGGGTGTGC 60  
ACACGGTGTT GTAGCCAGTT CAGGTACTGN ATATTTAGGA TTTGGTGNCG TTCACTGTAT 120  
TGCTATATTT TTGTAGCTAA ATAAANTCA ATAANTGTT AAA 163

SEQ ID NO:6269

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07431

SEQUENCE DESCRIPTION:

GATCTCCAGT ACTTTGTACA ATGTATAGTA TATTAAATAC ATTTATGTGT AATTTTGTGT 60  
GTATTTNTAT ATGGTATAAT TAAAAATNATT ACATTTATGT GATTGTAAAT CACAAAANGT 120  
ACTACTTACT ATATNCTGTA GNGTGTGTTG TGAATGTNTT TACCNGTGTT TGAGCATTAT 180  
GGNGTAGGGN TN 192

SEQ ID NO:6270

SEQUENCE LENGTH:85

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07432

SEQUENCE DESCRIPTION:

GATCTTCTTT TGTAATGTTT TTCATGTTAC TGCCTAGGGC GGTGCTGAGC ACACAGCAAG 60  
TTTAATAAAC TTGACTGAAT TCAAA 85

SEQ ID NO:6271

SEQUENCE LENGTH:284

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07433

SEQUENCE DESCRIPTION:

GATCCTAGTG AGGGATTGAT GAATGTTCTA AAGAAAATTT ATGAAGATGG AGACGATGAT 60  
 ATGAAGCGAA CCATTAATAA AGCCTGGGTG GAATCAAGAG AGAAGCAAGC CAAAGGAGAC 120  
 ACGGAATTTT GAGACTTTAA AGTCGTTTTG GGAAGTGTGA TGTGATGTGG AAATACTGAT 180  
 GTTCCAGTA AGGGAATATT GGTGAGCTGC ATATATAAT TTGACAGATA GCTATTTACA 240  
 TAGCCTTCTA AGTAAAGGCA ATGAATTCTC CATTTCTAC TGGN 284

SEQ ID NO:6272

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07434

SEQUENCE DESCRIPTION:

GATCAGTATT AACATCCAGG TTTTGATTGT TGTANTATGG TTACCTGGTA GATTACCTTT 60  
 GTATATAGGN AATAGACACT GGAATAGTAA GGNGTAGTGG GTCAAGATGT CTGCAACTTA 120  
 TTGTTCCAGAA TCACTCACAA NTGGGNAATC TGATATAAGG NCAAAANTGGG AGCACTGTGG 180  
 CCTNTTTTNN CAACTTTGTGT GTACATCTGN N 211

SEQ ID NO:6273

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07435

SEQUENCE DESCRIPTION:

GATCTCATGA AGTCTTCCTT GGCCCAACCA GGCAGATGCC CCGGGCTCCA GTGGGGGGAG 60  
 GGGTCTGGGG TCTGGTCCGG GTTCCCNAAAT TTCTCTTNN CCCANATCNC TATTTCTACG 120  
 CAGTGCGNAT AAAATTTGGA NTCGACTAAA ACCCTTGGTG CCCNGAAAAN 170

SEQ ID NO:6274

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07436

SEQUENCE DESCRIPTION:

GATCTGCCCC CCTCGGCCTC CCAAAGTGCT GGGATTACAG ACGTGTGCCA CTGNGCTCGG 60  
 CCTCAGATTC CATATTTNAA CACCAGCTGA TTGAGAGAAG GGGAAATNAGA AGAGCTGGAT 120  
 GAGTTTAAAT AACTTTNATT GTTCAGATTC CTGAACAGGN GTTGGGATAA TGGCCATCTT 180  
 TNCTTTCTTA TCCTTCCCCC CCTCACTGTG AAAAAATAACA GTCCACCCCA AGTCATACAC 240  
 TGGACCCAGT GCCTGCGGGG ACAGGNCTGT GGGTTTCTTG GTCACACCTG TGTGGTGNT 300  
 N 301

SEQ ID NO:6275

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

# EP 0 679 716 A1

TOPOLOGY:linear  
 CLONE:HUMGS07437  
 SEQUENCE DESCRIPTION:  
 5 GATCCAAAA ACCATTCTCNGG CCAAGNAACC CTGAAANGNA ACATCTACCT CCCGACCTAC 60  
 CACCCCACTG GCTGGTTCCA GAACGTCTCT NACCTAGACC TTGCCTCCCC TCCTCTCCTG 120  
 CCCAGNTCTG ACCCTGATGC TTAATAAACG NAGCGACGTG AGGGTCCTGA TTCTCCCTGG 180  
 TTTTNGGGGG GNTCCATN 198  
 10  
 SEQ ID NO:6276  
 SEQUENCE LENGTH:102  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS07438  
 SEQUENCE DESCRIPTION:  
 GATCTCTACT CAAAGATGTC TTGCAGTTTA TGAAGTGA TGTAAGTTCA TGACTAACAT 60  
 GATGACATCG TTATTAATA CATAAACTTT ATAAAGCTTA AA 102  
 20  
 SEQ ID NO:6277  
 SEQUENCE LENGTH:318  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS07439  
 SEQUENCE DESCRIPTION:  
 GATCTTAATA CCTAATTCA TCATTTCTGA AAATGTAAGT TTTTAGAATG TATTACAATA 60  
 TCAATGTGAA TATCTTGAAT CCTGTTACAA ATCCTGCACT GTATTAAACA TGTAATTAA 120  
 30 TTGTTTGTCT GATTAGCCAA TCTCACCACC CAAATGGGGA GGTATACATG TTTGANGAAC 180  
 TGTGTAAGTC AGTAATTGAT TTGTNCTGAT GTTGTAAGTC ANTAGANGTG TTTTGGAAGG 240  
 NAGCATGGTG TGTGAGGCAG TGTCTGTCCT TTTGTGCCAG CTCTGTATGN TGTTGTNGG 300  
 CCNTGTTTGT AGGCCTGN 318  
 35  
 SEQ ID NO:6278  
 SEQUENCE LENGTH:321  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 40 CLONE:HUMGS07440  
 SEQUENCE DESCRIPTION:  
 GATCTCGCCA ACAGCTAGCT GCTTAGGAGT ACCCCCACGA TACGCACAGC ACACCACTGT 60  
 CCCTTCACTG CACTTTCTTC CTGCCTTAGG TAGTTGGGCT TGCCACCCT AGTTTGCTTT 120  
 45 TGTAGTGGTT TGGCAAGGTT AGAAGGCCTC GGCCTCTCTG TNATGCTGGG AAGTGCCTAC 180  
 TCTCTGGGCC ACTGCTGCAG AGGCGGTGGC ACTTGTNATG GGTTTGGAAG ACCCAGCCAT 240  
 CTGCAGCAGA GGCAGCCTAT TCCATTGCA AGGNGNGGAN TGAACGGAGT AATTATTCTA 300  
 CTNTTCTTTT TACATAAATA N 321  
 50  
 SEQ ID NO:6279  
 SEQUENCE LENGTH:290  
 55

EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07441

SEQUENCE DESCRIPTION:

GATCCTGCAC GTCCGCAAGC CGGAGAAATA CCAGCTGCAC CTCCACGAGA GCTGCGTGCT 60  
 GTCCCTGAAG TTTGCCTCCT GCGGACGGTG GTTTGTAAGC ACCGGGAAGG ACAACCTGCT 120  
 CAACGCCTGG AGGACGCCGT ACGGGGCCAG CATTTCAG TCCAAGGAGT CGTCCTCAGT 180  
 CCTGAGTTGT GACATCTNCA GAAATAACAA ATACATTGTN ACAGGCTNGG GGGCCAAGNA 240  
 GGGCACCGTG TATGNGTNG TNTNCTTNGG CCATTNNCCC NTTCTGTNN 290

SEQ ID NO:6280

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07442

SEQUENCE DESCRIPTION:

GATCCAGTCT NTGGTATCAT GCTAGTNCCT ACAGGGCCTT GATAGTCTAG AGTTGGAAAA 60  
 GATGGTAAGC TTTGTNAGN GTTTAACAT TTNCTTGATG AAACAATAAA AAGAGGTAAG 120  
 CTTTNCCTN 130

SEQ ID NO:6281

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07443

SEQUENCE DESCRIPTION:

GATCCAGTTT TGTTGGGAC CAAAAACCAG TATTGTACAA AGTATTAAGC ATATATTTN 60  
 ATATTACTA AAATNGACTG TGGTGACTTT GGATAATAAG NAAAANTTTA ATATTAAANC 120  
 CATGTTTATT ACAGTATAAT TAACATGTTA AACCATGGGG NTAAATGCCA TCANTAAAAA 180  
 ATTATGNCAT NN 192

SEQ ID NO:6282

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07444

SEQUENCE DESCRIPTION:

GATCCACCCC CTGCCCACAA AACATTGCTC CTAATCCAC CGNCTGTCCC AAAACCTATG 60  
 NGANCTAATG ATAATCCCAC CACACTTTAC TGACTNTNTT TCCAGACTCA GCCCGGCTGN 120  
 ACCAN 125

SEQ ID NO:6283

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS07445

SEQUENCE DESCRIPTION:

5 GATCTGAGTT GCAGCTCTGC ACCCTAAATC ACACCCTGGG CATTGTCTGG GCTGCAGGGC 60  
 TGCCAGGTTC TGTACTTGTG TCCAGCTATG GCCCTGGNTG CTGGAGCTGG AGGGTTTTCT 120  
 GTGCTCAGAC TGTAGCCTGT AGCTCTTGGC CTGTGTAGAG CCCCCTCCTG TGCCCTCAGT 180  
 GGCTGTGCTT TGTTAACATN ATCAGGAAGA TGGGAAAGGT CAGGCAGNAT TTTTCTGNCC 240  
 TACAAAGGNN GGNNGAGAAA GGACACAGTA TTTTNAATGA NTTTACCATA TATCTTTGGN 300  
 10 N 301

SEQ ID NO:6284

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS07446

SEQUENCE DESCRIPTION:

GATCCTTGNT TTCTAAAAGC CAGTCCTNCC CTNCAGCTTT CCACAGTTTC TGTAAATGTT 60  
 20 TAATACTTNT ACAGTCAATG GCAATTTTAA ATATATATAT ATAANATN 108

SEQ ID NO:6285

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

25 TOPOLOGY:linear

CLONE:HUMGS07447

SEQUENCE DESCRIPTION:

GATCTGGGGG AAAGGCTGCC AGGGCCAAGA GGCTCGTCTC ACTCCCTGCC CTGCCATTTC 60  
 30 CCGGAGTGGG AAGACCCTGA GCAAGCAGCA CTGCCTTCCT GAGCCCCNGT TTTCTCATCT 120  
 GTAAAGTGGG GGTAAATAAC AGTGATATAG GNGTGCAAA 159

SEQ ID NO:6286

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS07448

SEQUENCE DESCRIPTION:

GATCACTTGA CTCTTGTAAG CGGACCTATA CTCAAAAGGC TTTGGCACAC TGTCACGNTA 60  
 40 TTAGTATACA AATGTGCATT TGTGTTTAAG TTAAANTGAG GTNTGCNNGG TAAACTGCNA 120  
 ANTAN 125

SEQ ID NO:6287

SEQUENCE LENGTH:63

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS07449

SEQUENCE DESCRIPTION:

50 GATCTACAGT AATTTATTCT NTCTAAAAGT AAAGCATTTT CAAAACCTCAG TATTTAAACC 60

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AAA

63

5 SEQ ID NO:6288  
 SEQUENCE LENGTH:104  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07450  
 10 SEQUENCE DESCRIPTION:  
 GATCTTTTCC ACTGGNCTAC TACCTGACCA TAAACATGTC TGCATTTGAA TTCTCTAAAC 60  
 CCTAAATCTG TGTCTATGAA AAATACAAAT GACTATTAAA TAAA 104

15 SEQ ID NO:6289  
 SEQUENCE LENGTH:123  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07451  
 20 SEQUENCE DESCRIPTION:  
 GATCTACCCA CCTCGGCCTC CCAATGTGCT AGGNTTACAG GCATGAGCCA TGGCGNCCGG 60  
 NCAAGTTTCT ATTCTTAAAA TAAAGAGGTT ATACATCTAA NTTACAANTC GTGGCCAAAA 120  
 NGN 123

25 SEQ ID NO:6290  
 SEQUENCE LENGTH:296  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 30 CLONE:HUMGS07452  
 SEQUENCE DESCRIPTION:  
 GATCTGCCCG NCTCAACCTC CCAAAGTGCT GGGATTATAG GCGTGAGCAC CGCCCCCAGN 60  
 TGATTCCAGG CGAATCTTC TCTGATGGGC GGGCGAGGGT GTGTTCTGTG GATGGGTTGG 120  
 35 NGTGTGTGTG ICTNNGTACA CAGATGATGT GTTTCCCTT CAGCTTCTTA CGTTTCTGA 180  
 GCATCCGTTG TGCCTTAACA TTTTCTGNTT GTCCTTTGGG NCAAGCAGT ATTTTACTNA 240  
 TNCTTTGAAT GTTCTCATTG TATTNTATCA TGTGACTTAT TAAAANNAGN TTNTAN 296

40 SEQ ID NO:6291  
 SEQUENCE LENGTH:228  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07453  
 45 SEQUENCE DESCRIPTION:  
 GATCTGATGG ATTAATAAGG GGTNTCCCN ATTGCTTGGC TCTCATTCTC TCTTGTCTGC 60  
 TGCCATGTAA GATGTGCCTT TTGCCTTCCA CCATGATTGT NAGGCCTCCC AGCCACATGG 120  
 AACTGTGAGN TCATTAAACC TCTTTTCTT CATAAATTAC CCAGTCTCGG GTATGTCTTT 180  
 ATCAGCAGTG TGCAAGNNGG GNGNTACAC CACTNCTCTA ACTANNTN 228

50 SEQ ID NO:6292

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SEQUENCE LENGTH:176  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07454  
 SEQUENCE DESCRIPTION:  
 GATCCTGTGG TCAGAGGCCT CTTTGGCAGT GTNTTCTTAC CCTTAAGNAA GGTCATGAAA 60  
 TCCAGAAGGG GCAACCTTTN CAGGAGAGCT TTGGAGTCAT TTCTGTGTGA GNCACATTG 120  
 CATAATCCTG NCAGNTTGCT TTTATATTTA AGGANTGATG TTACTTANCA ACTGAN 176

SEQ ID NO:6293  
 SEQUENCE LENGTH:310  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07455  
 SEQUENCE DESCRIPTION:  
 GATCTGACTG CTGGCTATAG GATTTTGGAC TTAATGACTG AAATTGCAAA TTGTCCTTTT 60  
 TCTTGGCATT ACAGATTTTG CCAAAATAAC TTTTGTATC AAATATTGAT GTGTGAAAGT 120  
 GAAGGAGCTA GTCTGCTGAA CCAGGAATAG TTTGAGATAT TGAAGTGTCA TTTTGNACA 180  
 TTTGAATACT TTGCAGGCTG GCTTTGTATA AACTTATCCT CNGGNNNCCT ATATGTTGTA 240  
 AATATNTAGN CCATAATTCC ATTATAANTA AANCCTATAA ACTATTCAAA CNAANANCA 300  
 ANAACANANN 310

SEQ ID NO:6294  
 SEQUENCE LENGTH:258  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07456  
 SEQUENCE DESCRIPTION:  
 GATCCCAAAA AGTTTCCTTC TGCCCTTTTT CAATNCCTCC TTCCCGCCCN TCTGCTTTTG 60  
 TCATTATATA TTACTTTGCA TTTCTAGAA TTTCATATAA ATGGAATCAT ANAGTATCTA 120  
 CTCCTTGTG TTGTCTGGCT TCTNTCACTC AGCATAATTA TTTTGAACT TATCTATGCT 180  
 GNTGTGGGTA TCAGTAGCTC ATTANCCNAT TGTGCTGAG TAGTNTTTNA TTGTATGANN 240  
 GTGCTACACG TTATNCGN 258

SEQ ID NO:6295  
 SEQUENCE LENGTH:31  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07457  
 SEQUENCE DESCRIPTION:  
 GATCTTAATA AATAATACCT TACTGCTTAA A 31

SEQ ID NO:6296  
 SEQUENCE LENGTH:38  
 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear  
 CLONE:HUMGS07458  
 SEQUENCE DESCRIPTION:  
 5 GATCTATGTA CAATTTTAAT AAAATCCTGT CCATGAAA 38

SEQ ID NO:6297  
 SEQUENCE LENGTH:73  
 10 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07459  
 SEQUENCE DESCRIPTION:  
 15 GATCACCTAC TAAGANGTAC TTCCTACNTT TCATTCTTTC TTTATAAGAA TTAATTAANT 60  
 TTTAATTGAC AAA 73

SEQ ID NO:6298  
 SEQUENCE LENGTH:311  
 20 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07460  
 SEQUENCE DESCRIPTION:  
 25 GATCCACCCA CCTTGGCTTC CCAAAGTGCT GGGATNACAG GCATGAGCCA CCGCACCCGG 60  
 CCCTATCTCA AGCTTCTTAA CTGCACCTGC TAAATCCCTT TTGCCATGTA AGGTAACGTA 120  
 CCAACGGTTT CAGAGNTTAG GNTGTGGNCA TTTTGGGGGG CTGTTTTTCT GACTGCAATA 180  
 CCTGGTNTCC AGTGAATCCA TGTTTAGTGG AGGACAACAT TTGAGGCACT TACATGGATN 240  
 CTAGGGGACA TNTATGTGAN TGTTAGGCAN AAAGTGCTGC CTNCANGNCA NGCAAATACC 300  
 30 NATTNAATAT N 311

SEQ ID NO:6299  
 SEQUENCE LENGTH:115  
 35 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07461  
 SEQUENCE DESCRIPTION:  
 40 GATCAAAAAA TAACTATAAG TATCCTCAGC CAAGTAGCCC ATGCCGCTGC TCTGCCTACG 60  
 GNGTACTCAT CTTTATTCTT TTACTTTCTT AATAAACTTG CTTTCAATGT ACAA 115

SEQ ID NO:6300  
 SEQUENCE LENGTH:310  
 45 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07462  
 SEQUENCE DESCRIPTION:  
 50 GATCCTACTG CCTCGTCCTC TCAGAGTGCT GGGATTACAG NNGTGAGCCA CCACAGNAAG 60  
 NCACAAATAG CGATTTTATC TACTACCACC AGAAATCTTC TGACATACTG TTTTACCGCA 120  
 TGAAGTATTG TTTTCTTTAT AAATTCCTTA ACAAATCTCT GTTGATAGA ATACTGTTGG 180

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TTAAAATATA TCAGCAGCTA ATAGCTCATT TAAATAGAT TCTGAAAGTT CAAGNATTTC 240  
AGGTTGCCAG NCACCNNTAT ACTCTACANA ATCAGANANG GCTCATTCTT GNTTNCNTNAC 300  
ACAACAAANN 310

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SEQ ID NO:6301  
SEQUENCE LENGTH:209  
SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear  
CLONE:HUMGS07463  
SEQUENCE DESCRIPTION:  
GATCAGGGAT GTCCAATCTT TTGGCTTCCC TGAGCCACAT TGAAGAAGA ATTGTCTTGG 60  
GCCGCACATA AAATATGCTA AACTGACGA TAGCTGATGA GCTTAAAAA AAAAAANTTG 120  
CANGAAAAAT CTCATGTTTT ANGAAGGTTT NCAGNTTGT GTTGGGCTGC ATTTAANGCT 180  
GTNCTGGGCT GCNTTGGNCC CGNGGGCTN 209

15

SEQ ID NO:6302  
SEQUENCE LENGTH:312  
SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear  
CLONE:HUMGS07464  
SEQUENCE DESCRIPTION:  
GATCATAGCT CCTGGTAACT GTGGACTTGA TAGATTNAG GTACCTAGTT CAGAACTCCC 60  
TAGTCACCAT CTCCAAGCCT GTCAACATCA CTGCATATTG GAGGAGATGA CAGTGGTAGG 120  
ACCCAAGGAA GAGATGTGTG NCTGANTAGT CGTCACCATA TCTCCAAGCT TCCNGGCAAC 180  
CAGTGGGAAA AGAAACATGC GAGNCTGTAG GAAGNGGGAA GCTCTTCCTT GGCANCTAGG 240  
AGGNNTTAGC CATTCTCTTC CTTATGCAAN GATTGAGGAN TGCAACAATA TAAAGNACGT 300  
GNAGTCCCNA NN 312

30

SEQ ID NO:6303  
SEQUENCE LENGTH:147  
SEQUENCE TYPE:nucleic acid

35

TOPOLOGY:linear  
CLONE:HUMGS07465  
SEQUENCE DESCRIPTION:  
GATCCGCCCC CTCAGCCTC CCAAAGTGTG GGGATTACAG GCGTGAGCAC CGCGCCTGAA 60  
NCTGAAGGT ACTTTCTTT TCAGTGGTTT GGGGCAGGGT GTTACACAGC TTAATAGATT 120  
AAGAAGAATA AAATGCTGAA TGCTAAA 147

40

SEQ ID NO:6304  
SEQUENCE LENGTH:294  
SEQUENCE TYPE:nucleic acid

45

TOPOLOGY:linear  
CLONE:HUMGS07466  
SEQUENCE DESCRIPTION:  
GATCATATT CCTCAAAAAT AAGAGAAATA AGGTTTATAA GGAAACTTGC TGGGATTGTG 60

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5 GTTGTTTTGT TTTCTCAGCA GCACAAACAA AACCAGAATT TAGCCTTTAG GACTGCTGAG 120  
 TAAGCCAAAT TAAATGACT ACTGCTTTGT NCATGGGTAA GCCATGTNCT TTTCAAATA 180  
 AGTGCCACTA AAANCCACAT AATGCTTTGG TTTCTATGTG GCTAATANNT ATTTNGTCCT 240  
 ATAGTTTATC TTATTTGTNA CTGATTNCGN TCTCTTGNAT GCCTCATATT ANT 294

10 SEQ ID NO:6305  
 SEQUENCE LENGTH:294  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07467  
 SEQUENCE DESCRIPTION:  
 15 GATCCATTGC CCCAAGGGG ACAACGGGGT GTCAGGGGAG TNAGGGGTGG AGGTAGGGGC 60  
 CAAAGAGGCT TACACGATAT CCCATACCTT TAATGCCTTT GGCCTTCCAT TCTNACTTCT 120  
 CTNATGAGAT TATTGTCAAC CCTGCTTTCC CTGGTAGATA TTGCCAGGC CCAATGCTTT 180  
 AACCTTAAGC TGATATTTTN CCTTTAGATG TCAATCTCGT TACCAGCAGC CTTTGACCC 240  
 AACTNCAGNG NTCTATATT NCGTAGNGGN TTTTCNCCA TGTGCATGGA TNT 294

20 SEQ ID NO:6306  
 SEQUENCE LENGTH:129  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS07468  
 SEQUENCE DESCRIPTION:  
 GATCCAGAG GCTGAGGGT GGGGAGAGGA AGCCATCATC TCATTACCTC TGTCACTGCA 60  
 GGGGTGGCTN CTNCTTCCCT TGTGCACTTG GGTGCTGTG ATTGTAAATA AACGTGATTT 120  
 30 CGTACCAA 129

35 SEQ ID NO:6307  
 SEQUENCE LENGTH:193  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07469  
 SEQUENCE DESCRIPTION:  
 40 GATCTCTTTG TNATTAAAGA AGTGGCTGGA TTGGAACCTT TAATATGCTA ATNTGGAAAA 60  
 TTAATTACCT TTATGAAGGT GGTATTATAC AAATAAGCAC ACTAACCCT CGGAAGTTGT 120  
 TTTACCTACT TAAAAAGTTT TANTGGATTG CNCCTCTGTA ANCTATTCCT AANNTGTGTA 180  
 TGANATATTT NAN 193

45 SEQ ID NO:6308  
 SEQUENCE LENGTH:291  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07470  
 50 SEQUENCE DESCRIPTION:  
 GATCTTTCTT CCTCTCCAGC CCACAAGTGG CTCTAGTGAG ACGAGCATTT AAGCTGCAGG 60

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EP 0 679 716 A1

5 TGGTGGCACT CGGGTCTCAG AGCCACCAGA CGTGCAGGTG GGACAGTGGT TCCAGCTCCG 120  
 GCTGCCTGTN AGCGTCCCTC CCAGGTGCTA GCCCTGGCAG GCACAGCCCT NCCCTCATGC 180  
 CAGCAAAGGA AATGCTCTTG ATGAGAGGCT CGCTTTAAAG AAGCCCAAAG CGTGTGCTTA 240  
 TCCAAGGGGT TCAGCTATTC CTGACTTCAC GGCTTGCATG TTTGATTTTG N 291

SEQ ID NO:6309  
 SEQUENCE LENGTH:97  
 10 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07471  
 SEQUENCE DESCRIPTION:  
 15 GATCATATGT ATTTNTATGT TCTGTAAAGN ATTTGACTTA CTAGTTCTCA ATAAAATTTT 60  
 ATTAGGACTA TAAAAAATAA AAAAAANTTT TAATAAA 97

SEQ ID NO:6310  
 SEQUENCE LENGTH:147  
 20 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07472  
 SEQUENCE DESCRIPTION:  
 25 GATCTTATGT ACATACCCAT TTTAGCTTTC CCATGCATAC TTAATGCAC TTGCTTTATC 60  
 TCCTTGGGCA TTCTTACTTA GGATTCAATA GAAACATGTA CAGGGTAAAC AATTTTTTAA 120  
 AAATAAAACT TCATGGAGTA TCTGAAA 147

SEQ ID NO:6311  
 30 SEQUENCE LENGTH:190  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07473  
 SEQUENCE DESCRIPTION:  
 35 GATCACATTT TGAAATGCCT AAAAGACTTT ATTGTTCTAA TTATCCAGAT GTACCTTTGT 60  
 AAAATAGCTC TTTTATGAAT TAGCTGATAA GGCTGTATGT TTCTGGANCA AATATTGGGN 120  
 CACCTAAAC CTTCCGGTTT CCGGGGGCCN GGGAAATNGG AATNAGGTT TCNAATNTTA 180  
 AATNAGGNTN 190

40 SEQ ID NO:6312  
 SEQUENCE LENGTH:65  
 SEQUENCE TYPE:nucleic acid  
 45 TOPOLOGY:linear  
 CLONE:HUMGS07474  
 SEQUENCE DESCRIPTION:  
 GATCTGGATT TTTGCCAATT CCTATGAAAA ATAATCCCA GAAATAAACT ACTAAGGAAA 60  
 ATAAA 65

50 SEQ ID NO:6313

55

# EP 0 679 716 A1

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07475

SEQUENCE DESCRIPTION:

GATCCATTGG TGTTCGGTTT GGGGTGTTTT TTAAGTTTTT TCTTTTATAT CATCCAGAAA 60  
TAAAGACACG TACACTAAA 79

SEQ ID NO:6314

SEQUENCE LENGTH:204

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07476

SEQUENCE DESCRIPTION:

GATCCAATAA CCCAGTTAGG TATTATAGAT TAGTATTTAA GTTTGCTGTA GATTGTGTGT 60  
GTGTGTGCTA AGTAAAAGTN CCATGATTCA CAATTTTAGT ATTAACCCAT GTTGCAAAAG 120  
CTGTTACTGG CCAACAGATT GTNATGATGT GTACCATATA ACACAAGCNT TANCINGGCA 180  
TTANCGTTTG TNAAGCCANN TNTN 204

SEQ ID NO:6315

SEQUENCE LENGTH:204

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07477

SEQUENCE DESCRIPTION:

GATCTCATCT CTGAAAATAA AATACCCCGT TAAAATTCTG GCTTTTGTTC GTTAAGGTTA 60  
TTGAGAAGGT AATAGAAAAA GATATGATAC TACTTTNCTC TCTGGATTT GTAAAANTAG 120  
TGGAATTTTC ATAAGGATTT TGTATTTTCT ATTGCTGTAT AACATTATTA ATACAACTT 180  
ATTGGCTTAA NANNCAAANN NNNN 204

SEQ ID NO:6316

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07478

SEQUENCE DESCRIPTION:

GATCACGAAG ATACATGTGT TTGACTGTTT AATTGAAAG TTTACATTTT TNATGCTTTG 60  
TGTTCGGTGT TAATTTTGT ACTCTGGTG GCTAGTTTTT GTCAAATCTT TTTTGGAATA 120  
TTGCTTAAAT GTNTTGATTT TATGATAGTG AAGCTTGAT TCAGTGTTTT GCCAATNAAT 180  
ATTATATGCT TGTAATAANN GCAAAAGANA AGCTTAAA 218

SEQ ID NO:6317

SEQUENCE LENGTH:335

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

EP 0 679 716 A1

CLONE:HUMGS07479

SEQUENCE DESCRIPTION:

5 GATCCCAGTG GGAACCTTCA TGCCTTATTN ATTTCTAATG GGTAAGGGG TTTTNTTACC 60  
AAGCATCCCT GACCTCCTGG AGACACCACC TGCTTTCCGG GCGGCACTGT GATGGGAGCT 120  
GGTGGCGACT GAGTCCTTCT GTACGTGCAA CTGGGAACT TTTGTCCTTT GAGGCTAGGC 180  
AGCTCCCTGC CCTCCGTGTG TGTCTGTTAT CTGGGGGAGA GGAGTGTGGG AAGGNNTTGG 240  
GGGAAGAGCT CCAGCCTGTN ITGNTCCCAA AGTTCNNAG TGGGAAGACC NGGGTNACCT 300  
10 TTNAGGGTN TANGGTGNGG GGAANTTNTT TTTN 335

SEQ ID NO:6318

SEQUENCE LENGTH:266

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS07480

SEQUENCE DESCRIPTION:

20 GATCTGCGTG TCAAAGTGT CCATTTGTTT ATGTAAAGTG ATATTAAAA AGATATAAAC 60  
TATAACTGTC CGTTACTTTT GGCAAAAGAT ACAACCACAT AATGTATATA ATTCCTAGTT 120  
TCCATATTTA TCCGCATGTA AAGGGCCGGT TTATCCATGT TACAGCTCTT CAATATTTAT 180  
GGCTAGAAGA NCTCGTATGT ACACTTTAGT TTCCAGAACT GTTTGGTAAC CTTTCGTACC 240  
TNATTAGAGG ATTCTNAAAT CTCAAA 266

25 SEQ ID NO:6319

SEQUENCE LENGTH:313

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS07481

SEQUENCE DESCRIPTION:

35 GATCCACCCA NCTCGGCTTC CCAAAGTNCT GGGATTATAG GCGTGAGGCA CCGTGCCTTG 60  
CCGATAAATG GATTNNAAGC TGAGTCTTTG AGGGAAGAGT AGGACCTGCA CTGAAACAAA 120  
AAGACAATTT GTGGGGTTGG GGNAGGAAC CAGATGTAAA CAATGGAAAG NTTTTGGTGT 180  
CACTTTGAGN NGGATTTTTT GGAAGGGTTT TGCAATGTCC ATTCTGTATC TTGGGTTANC 240  
ACTAGTAAGT CAAATGGNGA ATAATTTGAG TGTCACNT TCCCTNCAGT TNGGAAAAAN 300  
TTTTTANCNG TTN 313

40 SEQ ID NO:6320

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07483

45 SEQUENCE DESCRIPTION:

GATCTGTGCT TTTNCCCACT TTGCCACACT GTCTAAGGTG GCTTTNAACT GGAACCCAAG 60  
TGCAAAATAA GGTGGGTATT CGCTCCTGAA AAAAAAAAAA AAAAAAAAAA AAAAAANAAA 120  
AAAAAANA AAATNAACNA AANN 144

50 SEQ ID NO:6321

SEQUENCE LENGTH:332  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07484  
 SEQUENCE DESCRIPTION:  
 GATCCCTCCT CACTTGGCCT GCCACTTTGC ATGGTTTAT TCTTAACCTG GTCCCCCAG 60  
 TGTNAAGTGT AGTGGCATCC ATTTCTAATG TATGCATTCA TCCAACAGAG TTATTTATTG 120  
 GCTGGAGATG GAAATCACA CCACCTGACA GGCCTTCTGG GCCTCCAAAG CCCATCCTTG 180  
 GGGTTCCCCC TCCCTGTGTG AAATGTATTA TCACCAGCAG NCACTGCCGG GCCTCCCTCC 240  
 CGGGGGCACT GCCTGAGGGC GAGTGTGGGN NTAGCATTAG CTGCTTNTN CNNNCCTGGN 300  
 ACCNACTGTG GCCTGGAATN GNATAGTGGT NN 332

SEQ ID NO:6322  
 SEQUENCE LENGTH:376  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07485  
 SEQUENCE DESCRIPTION:  
 GATCTAATTA ATGTGAAGGA CTNGCCAGTC TGGGAAACCG CCTGCCACGT GGAAGAGCCA 60  
 AACCCGACTC TNTGCTGCCA CATGCCGTTT CCATGCCCGG CTGCTGGGCA CCTGGNAGAG 120  
 CTTCCAGAAT CCTCGCAGAC AGCCCAGAGC CTGCCGCTAC CCTCGGCCTG CCCACCACCA 180  
 AGCAAGCAGC AAGCAAGATG GGGTTCTCAT CAGTTCTTCC TTCCCAACAAT GTAGGACCTT 240  
 TCCTTTTACC TTTNCAATGG GATAAAATAG TTCAGAGTTC ATTAGTCATA TTTCATTGGN 300  
 CACAAGGAAT TCAANGGTTT TTTNANCAAT TTANCANTTC ACCCGTCTTA TGTNGTTTAA 360  
 NANTNANANC NANTCN 376

SEQ ID NO:6323  
 SEQUENCE LENGTH:109  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07486  
 SEQUENCE DESCRIPTION:  
 GATCACAGAC ACCCAGTNCG TGGNCCCTGT CTTACCCCCA GCNAGCATCA TGTNAGTGGG 60  
 CCTCGTTCCC CCCGGAGAAT CCCAGCGGGG CCTCANAGAT GCATCTGGN 109

SEQ ID NO:6324  
 SEQUENCE LENGTH:156  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07487  
 SEQUENCE DESCRIPTION:  
 GATCTTGGCT GCTTTTAACT AGAAGGTTGC TTTNATNAGC ATATTTATAC TGCTGAAGGA 60  
 TGAGTGTNAA TTAAATTAA CTTTGCCGTT TTGTAGAGAA AACTATTAC AAGATAAATN 120  
 CCAAGTCTTT NCACCTGTCA GGCATGCATA TNTNAN 156

SEQ ID NO:6325

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

5 TOPOLOGY:linear

CLONE:HUMGS07488

SEQUENCE DESCRIPTION:

10 GATCCCACTG AAGGGTTTGG TGTGTTTAGG CCTCATTCTT TTGTCTTTT CCTACTCCGT 60  
TCCTGGCATT TCCTGATTTC NAGTGTATAC TCTGTAGTCT CAGTTCGTGT TTGATTCCAT 120  
TCCATGGAAA TAAAAAGTAT GTTGTACATA CTGCCGAAGA ATTGTCTTGC AAGTAAAGGC 180  
TTCCCCCTTT ACTATAAGAC TATAANTAAA ACCTTATTN ATCCTTAAA 229

SEQ ID NO:6326

15 SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07489

SEQUENCE DESCRIPTION:

20 GATCTTACAC ATTCTGTGTA TAAAGACCTT AACTCCACAG GACGGACATT TTAGAGTTA 60  
AATTATTAAG GCTATCATT TTTTAGTAAT GTCATATTG CAACTTTTT NAGTTTTGGC 120  
CTTTAATTTA AAANGCCTAA TTTAANGTG CTGCCTGTNA GTAACCTTG ANTAANANCA 180  
ANTTATNACN 190

SEQ ID NO:6327

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS07490

SEQUENCE DESCRIPTION:

35 GATCTCAGCT CTTTNGGTGA CTGCATATGC AGTGGTGACC CAGCACAGTT TCCATCAATC 60  
TCGTCAAAG ACTTGAGGTT GTTGGGCACA GTATTCAGA TGACCACAGT TAAAAAGCTG 120  
GGTATACACA ATTAACANCC AANGTGATAT GCATTATAC CTTTCCCTTT ATGNCCAATT 180  
TCTTTATAAA TATGGCTCAT CTGCTCATAA CTGTTAGNCC CACCCAACTG TCATTAGTAA 240  
CCTGAGTGTT TATGCTTGCA AACTGTATG TTGTTATTGT CTGATTGAT NATATTCNGT 300  
GNTGTTTAGN GAATGCNGTN GTGTTNANT GNATCACAAA NAATTNCCCC ATTNN 355

SEQ ID NO:6328

SEQUENCE LENGTH:298

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS07491

SEQUENCE DESCRIPTION:

50 GATCATTGTA ATCTCAGTCT TCAGCCTGCA CTGATTGTA GCCTGCACTG TCTTACTGAT 60  
TTACAAACTG AAATCACTGA GAAATGTCTT TAGTTCAGTG AGAAGAAACC AGAACAATTG 120  
TTCCTAGTGT TGTGTTGTTT TTTTAAAGCA AATTACTTAC TGTATTTTNA TGGCAGGNGG 180  
GNGAAAAAGT GTTACAACGG TTTCTAATGA AGTCCGGTAT TTANNTGGTA AATGACTAAT 240

GTGTTTAGTA GTGCCAAANT AAACCATTAN NTGNTTGTCC TTGCCAAAN ANANNANN 298

5 SEQ ID NO:6329  
SEQUENCE LENGTH:225  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07492  
10 SEQUENCE DESCRIPTION:  
GATCACAAAG AAAAAGCATT TTTAAAAAGT TGGCAAACGC TGAACGCAC TGTGGTATGA 60  
GGCGCATTGC ATTTCCATAG CACTGAAAGTA CCAGTTTCCA TTCCTGGGCT GNGATTGTTT 120  
TTCCCGTGGT TGTATTGTTT TGATTTAACG ACCACCAGNG TAACTGNITT TTNTTTGTTT 180  
15 GTTNTCTGGT GGGGTNNCCA CCAATTAATA CTNNTANAAN CCCGN 225

SEQ ID NO:6330  
SEQUENCE LENGTH:229  
SEQUENCE TYPE:nucleic acid  
20 TOPOLOGY:linear  
CLONE:HUMGS07493  
SEQUENCE DESCRIPTION:  
GATCGACTTC GATAAAATAC TTTTCCTAA TCAAAATTAG AGTGTGTTT TGTCTGTGT 60  
25 AAAATAGAAT TAATGTATCT NGCTAGTAAG GGCACGTAGA GCATTAGAG TTGTCTTTCA 120  
GCATTCAATC AGGCTGAGCT GAATGTAGTG ATGTTTACAT TGTTTACATT CTTTGTACTG 180  
TCTTCTGCT CAGACTCTAC TGCTTTTAAT AAAANTTNAT TTTGTAAA 229

SEQ ID NO:6331  
30 SEQUENCE LENGTH:345  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07494  
SEQUENCE DESCRIPTION:  
35 GATCTAAAGA CCCGATAGGT GCAGAACCCA TCTGGACACG GAGACCAGGA ATGGAGTTCC 60  
ATGGAGGCCT GGCTGGCACT GCACCCGGGC ATGAGGACAC ATCCAGTAAG AAGACCTGCC 120  
TCAAGAGGTG CACTGCGGTG ACCAGTGGAG GTNACTGGTT GGAGCCTGGA ATTGGAAGCA 180  
GATTCCAAGC TCTGGTGGAC AAACCTCCA GGCCTGGTGG GATTACAGC TGGGGCAGNC 240  
40 CTCATCCTGG CTGCNTGGCC ACAGNCCCN GCTNTTTNCC ACTTGGTGGT AGGGCCGATG 300  
CCTTNTTTGG ANGAGNTGGG NTTNTTTTGG TCNCGACTGN GTANN 345

SEQ ID NO:6332  
45 SEQUENCE LENGTH:219  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07495  
SEQUENCE DESCRIPTION:  
50 GATCACAAAG AAAANGCATT TTTAAAAAGT TGGCAAACGC TGAACGCAC TGTGGTATGA 60  
AGCGCATTGC ATTTCCATAG CACTCNAGTA CCAGTTTCCA TTCCTGGGCT GAGNTTGT 120

55



TTCCCGTGGT TGNATTGTNC TGATTTACAG TACNCCAGAG TAACTGNTTT TTTTTGT TT 180  
GTTTTCTTGT GGAGTTAACA CCANNTAAAA NTGTAAAN 219

5

SEQ ID NO:6333

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS07496

SEQUENCE DESCRIPTION:

GATCTATTTT TCAGCTTTCA CTTATGTGAG CCAATAAATT CCTTTTTTGT TGAAGGCAAA 60

15

SEQ ID NO:6334

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07497

20

SEQUENCE DESCRIPTION:

GATCTACCCC CCCATCAACG TGCCCCCTCG ACTCCCGGTG CTGCGGAAGA ACTGAAGGTT 60

GCNATGCCTT ACTCTGACGG GAGCATCTGT ATTTTAATGT TAAAAGCCCA CAAAATAAAA 120

ATAAAAAGTA ACTGAGATGA ATTTAATAAA CAAA 154

25

SEQ ID NO:6335

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS07498

SEQUENCE DESCRIPTION:

GATCTATGCT GTATGCACAG ATTGCATAAT GGCTTTTTTN CTTAACATTA TGTGATAAGC 60

ATTTNCCTGA ATAANCTTAT TTTAAAATAA A 91

35

SEQ ID NO:6336

SEQUENCE LENGTH:181

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS07499

SEQUENCE DESCRIPTION:

GATCAGGTGT GGCCAATNAA ATTNAAGAGG AAGTCTACCT GGGNTTCTGG GAAAGCTTTT 60

CCAATAAAAG ACACAGGCAT GGCTAACACC TCCCTGGGCC TCTTCTTCT ACCTTGATTG 120

AGGGTGTGAT GCCTGGAGCC ACAGCAGCCA CTTTGNNNNC ATGACAAAAA GGCCAAGNGN 180

45

N 181

SEQ ID NO:6337

SEQUENCE LENGTH:77

50

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55

CLONE:HUMGS07500

SEQUENCE DESCRIPTION:

5 GATCACCAA ACCTGATGTT TTAAATNTGC TTTCTTTTGG AAATTTATGT TTTCAAATAA 60  
AATCTCCCTA AAGCAAA 77

SEQ ID NO:6338

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07501

SEQUENCE DESCRIPTION:

15 GATCCTATGA GTGTAGTTAA TGACTGTTNG TAAGTCAGTA GAGTAAAATN CTGTGTCCAC 60  
GGGGTGTAC AGCCTCACCA TACCCTGTTG AGGTGTGAAA TGCCCCGTCA GAAATTAAAT 120  
ACAAACTTAA ATGTGCCTAT TGGTGTCTAA NCTTCATACA ATGTAAGGNC AGATTCCTTT 180  
TNGGNNTACT GGGTGTCTGC GCCAGGTTTG NTAGTTAGAC TTAAAANCCT GANATTCACT 240  
TTTTGGGGGG NGGGNTATAC TGANN 265

SEQ ID NO:6339

SEQUENCE LENGTH:161

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07502

SEQUENCE DESCRIPTION:

25 GATCTATTGG AAAACAACAT GGAATGGAAT TCTGGAAATN ATTATTCATT GAAGAATGCA 60  
GTGGCCAAGA AAATATCAAA TGTAGATTGT NAACGCTTGA GAATCATGGC TATGGTTTCT 120  
30 NATGTCCTGG TAACANGCTG TTATCTTTNN NGACATTTTN N 161

SEQ ID NO:6340

SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07503

SEQUENCE DESCRIPTION:

40 GATCTAGTTA TAAATACAT GAAAAGGCTG ATGCAGCAAT CGGTGGAATC GGTTCGGAAT 60  
ATGGCATTG ANTTTATTCT TGACAATGTC CAGGTGGTTT TANAACAAAC TTATGGAAGC 120  
ACATTAAAAG TTACATAANT ATTACCAGAG AGCCTGATGC TCTCTGATAG CTGTGCCATA 180  
AGTNCTTGTG AGGTATTTC AAAGTGCATG ATAGTAATGC TCGGNGTTTT TATAATTNNN 240  
NNTTCCTTTT AAAGCAAAGT TTTGTACAT NN 272

SEQ ID NO:6341

SEQUENCE LENGTH:345

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07504

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCAGTGTG GAAAAGCCTT CANTCAGAAA GGAAGCTTAA TTNTNCACAT CAGAGTCCAC 60  
ACAGGCCTGA AGCCCTATGC CTGTNCCCAG TGCAGGAAGA GTTCCACAC CAGGGGGAAT 120  
TGTATTCTGC ATGGCAAAAT CCACACAGGA GAGACACCCT ATCTNTNCGG CCAGTNTGGA 180  
AAAAGCTTCA CCCAGAGAGG GAGTCTGGCT GTGCACCAGC GAAGTCTTCA CAGAGGCTCA 240  
CCCTTTGACC ACTTTCCTGA AGAGAAGTTC TCTTTATGAA TTAAGGAGTA CAAAATCCTC 300  
TGAGNTTGAN GCAACCCTAT CCAAGTTTCT ANTGGGANTG GTTGN 345

10 SEQ ID NO:6342  
SEQUENCE LENGTH:212  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07505  
15 SEQUENCE DESCRIPTION:  
GATCTGTCTG CCCATCTGGC CCAGGGGGTC CGAGAAGGGA AGCCTTGGGC AAGAGGNGAC 60  
CAGTTGCAAT ACTGTACTTC CTGGTCAGTG GCCAGAGGAT GCGTGCAATA GCAGAGGCCA 120  
GGTNACCCCT TCAGCCTTGG CCTCTGCCNC TCCATTGGCC CTCCCTNCCT GNTNCTNCNT 180  
20 GGTGTNGGTC AGTCCTTTTC TAAAGNTGTC CN 212

25 SEQ ID NO:6343  
SEQUENCE LENGTH:316  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07506  
SEQUENCE DESCRIPTION:  
GATCTTCGTA TAATTGGCCA CTAATGTGAG AGTTCACTAC TAGGCAGAAA CTATTATGGA 60  
30 CAGTNAATA ATGACTTTAA TCTCACCACG TGAGTTTAT GCAGTCTTTC CTGTCTAGCC 120  
CTTGCTCTN CTGCCCATG TNATTGCGGT GCAGTAGTTT CTGTNGTATA ATAGTGTTGA 180  
CAGCAGCTCA GAAAAGGAGG GAATGCTACT GATAATTTGT AGATAATNNN NTTTANGACT 240  
TAGGGGAACC ATTGACCTTT GANATTTTNA TTAGAAAAATN ATTTGTNCAG AATCAGACTC 300  
35 CATTATTNC CATATN 316

40 SEQ ID NO:6344  
SEQUENCE LENGTH:184  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07507  
SEQUENCE DESCRIPTION:  
GATCAAAAGG AATGATGTAT TTTTAACGTG TTGGCCAAAG TCACTGGATA AAATGAGAAT 60  
45 TGTATATTN TAATTCATTT TGCAAATNCA GAAAGTTGGT CCAGATATAT GTCACAGANC 120  
TTTNCCTTG TATACTACTC TTACAATGGA AAANNNTCCC GAAANCTGTA TACTTCTGAT 180  
TANN 184

50 SEQ ID NO:6345  
SEQUENCE LENGTH:361  
SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS07508

SEQUENCE DESCRIPTION:

5 GATCAGACCA TGCAGGTAAG GTGAACCAGC TGCACGGACC AGGTTCCCGC AAAACATTGC 60  
 CAGCTAGTGA GGCATAATTT GCTCAAAGTA TAGAAACAGC CCACCTGTGC CCACTTTGAC 120  
 CATTGGTGAG GATAGATATA AAATCACTTC TTCCAACGAA GCCTAGGTGA AAATCTATTT 180  
 ATAAATGGAC CACAACCTCG GGGTGTGCTT TTTGTGCTGT GACTTCCTAA TTATTGCTAA 240  
 10 AGAACTACTG TTTAGTTGGT AATGGTGTA AATTACATTC AGCTCCTTCT TGTCATATAA 300  
 ANAGGAATTT GGNGGGGTGC GGTTTAAANA TTTTATTNCA CCTGTACCAT TTNGTCACTC 360  
 N 361

SEQ ID NO:6346

15 SEQUENCE LENGTH:266

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07509

SEQUENCE DESCRIPTION:

20 GATCTGTTGT TATACCAATT GAATTAATTG AGTTNNTTGT TGGACATTTG GGTGGTTNC 60  
 AAGTCTTTC TATTGTGAAT AGTCAATGGC AGTATTTTNA ATGTTGGTCT ATTATTGTAC 120  
 TAAATAGTTG TTTATATTGA GCTTGGGAAA GCTTTCGTGT CCAATAGAAA TAGCATATTA 180  
 AAATAATGC CACTGTATAT NAATGANAGT GTTGATTATA TACCCTAGAN ACTTAANCCT 240  
 25 TAAGGNAGTT ATGTNTNAAT TNNCTN 266

SEQ ID NO:6347

SEQUENCE LENGTH:355

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07510

SEQUENCE DESCRIPTION:

35 GATCAACTCC AGTTTCCAAT GTCTATGTGT CTATGTGTGT ATGTNCCATA CATATGIATT 60  
 CACATGAAGA CCGGCATGGC CAAGTNCCTGC TGGAGGAGCA CTCAAGTGTG ACGAGCAGGG 120  
 CCACTGGACC CTGCAGGGCT GTGGTGTATA TAGTGCAGCT TTGGAGGTGG AACTCTATTT 180  
 NAACACTTTT CTATGGAGCC TTCCGAGTCC CAGGTTTNA CTTGAGGCTG TCTGTCTGGA 240  
 TGGCGGTTTT NAGACCTCCA TTAACATCCC TACCCAGCAT TCTGTACTTC GGGGGGNCCT 300  
 40 CTATCTTGTN ATAAACTTN TTACCAAGTG GAACATCGGT TACCCACCTT TTGTN 355

SEQ ID NO:6348

SEQUENCE LENGTH:358

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07511

SEQUENCE DESCRIPTION:

50 GATCGTCCTG CCTTTGTAAG GCAGATTGG AGGGGAGGCC CAACAGCAAA GATGGAGAGG 60  
 AAAAAGGGAG TGGAGCTTGT GGAACAGGAA GCCCCCAGG GTCTGTCCAG GGCTGCTCAG 120  
 CTCTTNAGGA TGTGTGGAT GGTGAAGTGG TGATGGTGTG CTGGAGCAGC CCAGCACCTC 180

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5 CACTGGGCCC AGAAGGTCTT GACTTCGGAC ACTTACCCCT GTTTCACAAG TGTTTATAAA 240  
GCTGTTTTTN CTTTNGTTTT TCTCCTAAAT AATCCTTACT TGGTAGTTAT NAATCCTTCT 300  
TTGGGGGAGG GACAGGGGCT TTAANCCCTG GAGGAAAATT AATTTNNAT TAANGGAN 358

10 SEQ ID NO:6349  
SEQUENCE LENGTH:106  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07512  
SEQUENCE DESCRIPTION:  
GATCATGGAA GCTCCGTGCC CCTTCTCCCA TTCCTTGCCC TAAGTATCGC CTCCATCTGG 60  
15 TTGTTTGCT GTATCCTTTA TTAATAAACA AGTAAATNTA AGTAAA 106

20 SEQ ID NO:6350  
SEQUENCE LENGTH:135  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07513  
SEQUENCE DESCRIPTION:  
GATCAGTGCC AGAAGTCATT GTATTCAAAG AAGAATAAGC AAGAAAGAAA AGAAGGAAGG 60  
25 AAGAGAGTA GACAGATACA AGATGAAATC CTGTCAAAAA ATGGAAGGAA ANCCAGAAAN 120  
TGAGAGTNNN CCANN 135

30 SEQ ID NO:6351  
SEQUENCE LENGTH:156  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07514  
SEQUENCE DESCRIPTION:  
GATCAGGAAC ATGGCAAGGA ACACCACACC ACTGCTTTTN AGCATTGTAC TGGAAGTNCT 60  
35 ATATAATGCA GTGTTAAAAA AAAAAGAAAT AAAATGCACA TAGATTTGAA AGGNTGAAAT 120  
ACAACTTTNT NCACAAGTAA CATGATTGTN TTTNTN 156

40 SEQ ID NO:6352  
SEQUENCE LENGTH:134  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07515  
SEQUENCE DESCRIPTION:  
45 GATCAAAAAG AACTATGAG TAACAAGCTA TAACATAGTT CACCACAATG GGACCCCCC 60  
CCCTTTTCCT NACCCTACAG TTAGTAATAT TNCAATTAAA NTANCTATAT TCTNCTATAT 120  
TTTNCCTGTT AAAN 134

50 SEQ ID NO:6353  
SEQUENCE LENGTH:107

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07516

SEQUENCE DESCRIPTION:

GATCCACATA TCTCTAACAC CATTAATATG AATCATTGGA AATATTTTAC TTATTAACAA 60  
AGTCTCTTGT GTTAAGCTAC AGATAAAGCT TTTGTGGTAG TGTCAAA 107

SEQ ID NO:6354

SEQUENCE LENGTH:350

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07517

SEQUENCE DESCRIPTION:

GATCCAGAGA CATGTGGCAG CAGGCATGGC TTCCCCTTGG CCTCTCTGTA CACTGCCCCA 60  
GGACTGTCAT TTTGGCATCT GCAAAGGAAT CACTTTAGAA AGCCAGCACC TGGTTGATGT 120  
GTATTCATAC TGACATTAGA TTGATGTGCA CTGCAGGGGN AANNGCGGTA GCTGNCACAG 180  
NAAAAGGATG TTTTGATAGG AATAATTTTC TAGTATGTCT TGAAACATGT TCATCTGGAA 240  
GTATTTTCCT CCAAAGTAAT GTAGCATGAT TTNCAAGGA TTGTTAACAT GCCTGGGATT 300  
GGGAAAGNTA GGCCTAANGT TGTGCCAAAC TATATCAATA AATTCCTTN 350

SEQ ID NO:6355

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07518

SEQUENCE DESCRIPTION:

GATCCCACTT GCATGCACCC AGAATTTTAT ATTCCCAGG AATATAGCAG AGGAATATTC 60  
TGGTATCATA TTTATCTTTC ACCATCTCAA AAATTACAGT TTTAAAACT CAAATAAAAT 120  
TCATCACTAT AACCAAA 137

SEQ ID NO:6356

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07520

SEQUENCE DESCRIPTION:

GATCCAACCC TTGCTAGGTA TCATAGTTTA GGCCCATTTA CCTTCCCCTG TACTGGCAGT 60  
TCAGCCGCTT ACATGCACTC ACCCTGTTTG TGGCTATTTT AAATTCATAT TATTAATAAA 120  
CAAAAAAAC CCAAA 135

SEQ ID NO:6357

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07521

## SEQUENCE DESCRIPTION:

GATCCTGTCT CAAAAAAAC ATAACCGACA TCCAGAAGTG AAATAAATTA GCCAGTGTCA 60  
 CAAAGTAAA 69

SEQ ID NO:6358

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07522

## SEQUENCE DESCRIPTION:

GATCTTAAAA NTACAAAATG TAGACAATTA ATATTCAGGT GCTTACTTTT GAGCCAATAT 60  
 GTAGCAGAGA AAAACTAATT NNTCTGTGGC AGTATTTTNA TTTTNGGCAT TTCCCAGGAA 120  
 TTAAGTGAAG ACTAAACTC ATATGTGANG TGTAATGATA CTANGGNAAG AGTCAGTAAA 180  
 ATTNCCATTT GGCTACCAAA 200

SEQ ID NO:6359

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07523

## SEQUENCE DESCRIPTION:

GATCTTGTAATATATAAAT NTAAATAANA TTAAANCTGT AATTCCTTTN CCCTCCAAAG 60  
 GCTTTTNTGT ACATGGCGCT GCATTTGGCT ATTTCCTTTG GAAATAAATA ATGTN 115

SEQ ID NO:6360

SEQUENCE LENGTH:319

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07524

## SEQUENCE DESCRIPTION:

GATCTTCCCA CCATCACAAA TGAATTTAAA GATGAAAAGA AACTCAGTTG CTCATACAAC 60  
 TGCATTTTTT CTGTCTATTA TGGGAAACAT CAGACGTTCT GAGTAAGATA TATCTCATGG 120  
 CATTAGTTAA TATAACTNAT ATTGTTTAA TCATGGTATT ACATGCAATT NATATCAGAT 180  
 AAAAGCAGAA CACATTTTTG TNCTGCCTCT CTTAAATGCT GAATGTAGCT GTNATGTATA 240  
 ANTCCATTTA GTTTTATGTN CTAAAGGNC TTTTGTGCAC TCCAGNTTN CAGTAAANTA 300  
 GNATTCCTAG TAAANCNNN 319

SEQ ID NO:6361

SEQUENCE LENGTH:141

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07525

## SEQUENCE DESCRIPTION:

GATCCTAATT TNNTACGAA TCCCGATGGA ACCCTGTGCT GTTNANACAT CAGTGTGTAA 60  
 AACTCTGTGT GTCCCTGTTG GGCTGTCCAG ACAGTCTGGA CTCTGTGAAA TTAAANATT 120

AATTAAAGGA AACAAACCAA A

141

SEQ ID NO:6362

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07526

SEQUENCE DESCRIPTION:

GATCTTTTGC TTAGACGTTA ACTTGATGCA TCATTGGAAA GNTGTTTCTC TCATCTCTGT 60  
 CCTAAGGCTT GATAAAGTCA TTAATAATTGT NTTCTTTTGA CTAAA 105

SEQ ID NO:6363

SEQUENCE LENGTH:392

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07527

SEQUENCE DESCRIPTION:

GATCTCAGGC CAGCCGTTTG TNCTCCTAGC AGGGTTGCTG TGCTGGCCAC ACGGAGAGGC 60  
 CCTAGAGAGC CTCATGGATT GTAACATAAG AAGAAACGGT TCCTTTTGT TTTTAAAAA 120  
 ATNATTTTAA AATACCGTTT TTAACACCGT TCTCTCGGTA CTTTTTTTAA GCTAAGTCAG 180  
 CATTGTCTTC CAGTGTTAAA GGCATCCCTC ACCTCTGCAT TGACCTTACG NATCCATGCC 240  
 AAGGAATGGG ATTTCCATCC CTGNGGCCAG TCAGTTAGGG TGTCAATTGT NCCTATTGA 300  
 NTTTTAATG NAATCTGATG NGGTGAGNTC AGGTTTANAA NTCTTCAAN GNCCGGTTNA 360  
 TTGTACCAGG NNTGNTATGG ATTAATCCNT GN 392

SEQ ID NO:6364

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07528

SEQUENCE DESCRIPTION:

GATCTCCATT CCTTGGGCTC CGCGTCCGAN TTCATGGTGC GCCGCTGTGC TGGGAGCTGC 60  
 AGTGGGAATN TNTGGGACAC CTTGACCAAA GGGGAGCTTT GTNTCGTGTG TTTTGAAAAA 120  
 GGCTTAATGA AGAGAATGTT GTTCATTCTT AGTAGTATAG TTTGCAATTC TTAATGGCAA 180  
 ATAATAAGTT TCAGTAGAAA ACAA 205

SEQ ID NO:6365

SEQUENCE LENGTH:343

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07529

SEQUENCE DESCRIPTION:

GATCCTTTTC TACCCACTTT CCTATGGAGG ATTCCAAGTN ACCACTTCTC TCACCGGCTT 60  
 CTACCAAGGT CCAGGACTAA GGCCTTTTNN TCCATAGCCT CAACATTTTG GNAATCTTCC 120  
 CTTAATCACC CTTGCTCCTC CTGGGTGCCT GGAAGATGGA CTGGCAGAGA CCTCTTTGTT 180



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GCGTTTTGTG CTTTGATGCC AGGAATGCCG CCTAGTTTAT GTCCCCGGTG GGGCACACAG 240  
 CGGGGGGCGC CAGGTTTTCC TTGTNCCNCA GCTGCTCTGC CCNTTNCNN TTATTNCCTG 300  
 ACTTCAGGNC TTGAAACNNT TCCNGTGGTG TAAATAAAAA ANN 343

SEQ ID NO:6366  
 SEQUENCE LENGTH:332  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07530

SEQUENCE DESCRIPTION:  
 GATCTGTACT TTGAAAACAC ATTGAGTCCC TTTAACCAGG AAGAACTCTT CTGGGCGACC 60  
 GTCCACATGT TCCTTTCCT TCCTAATGAC GTGAAGTCTG AACTCTACAG AGCCTCTGTA 120  
 CCTTCTCTTT AAAGGCAGCT CTGCTCACCA GGAATTGGCT ATAATNCTTT CCAACTCTCT 180  
 CATCATTTTA ATAGCTATCA GCAAATGTAG AGGTGTAGGG GATTTTGTA CATCTGATGT 240  
 ATGTAAAAAG ANATATTCAA GTTGGAAGGC AGNCTAGAAC TGNCTGNGA GATGTTTGAT 300  
 GTACACATTA AANNTAAGGA ATTTTACATA AA 332

SEQ ID NO:6367  
 SEQUENCE LENGTH:258  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07531

SEQUENCE DESCRIPTION:  
 GATCAAGAAT GGCAAGAAAA TCACAGCCTT TGTACCCAAT GACGGTTGCT TGANCTTTAT 60  
 TGAGGAAAAT NATGAAGTNC TGGTTGCTGG ATTTGGTCGC AAAGGTCATG CTGTTGGTGA 120  
 TATTCTGGA GTCCGCTTTA AGGTTGTCAA AGTAGCCAAT GTTCTCTTT TGGGCCTATA 180  
 CAAAGGCAAG ANGGNAAGGC CNAGNTCACC ATCCCTAAA TTTTAAAAG NAGTTTCACA 240  
 AAGNTNTGCA TATTTNNN 258

SEQ ID NO:6368  
 SEQUENCE LENGTH:148  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07532

SEQUENCE DESCRIPTION:  
 GATCTGTACA TTATTGCATG TGGCAGTAGT GTATTNCAT TTTGCATACT ATTCCATTTT 60  
 AAGAATATAT TGCTGTTTAT CCTATTGATG GATATTTGTA TTTNTNATAC TTTTGTGTA 120  
 TAATAAAAAT ACTGCTGTAA ATATTAAA 148

SEQ ID NO:6369  
 SEQUENCE LENGTH:344  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07533  
 SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCTGATTC AAAGATAACC ATTACCCATC TTTCCAAGGC CCATCTAAGT AGTACAGGTG 60  
 TTTTGTCTTT TAAAAATTGAC AGTCCTCTTT GCATTAAAGT TGTAGGGGGG GAATACAATA 120  
 TAAATATTCT NCTGTGTAAA CGTAAGAATG TGCTGTAATC TCCAGTTCCT TTGGATACCT 180  
 CAGAATTCTA TTTATTGTAT ACACTTATAC TGTTTATNCA ATGTTTTGGG TCTTACTCTT 240  
 TTTGACGTAT TCTCATCAGT CTTCACTCTA GTTGCAAGC NCTGAAGTTA TTGATTACGT 300  
 CTAATGTGCA ATNNGGCTTC TATTAANTGC TATTTNATGG TTCN 344

SEQ ID NO:6370  
 SEQUENCE LENGTH:292  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07534

SEQUENCE DESCRIPTION:  
 GATCTNTGTC ACACCCAAGC TGGTGGAGGA GCACCTCAA AGTGCCANT ATANGAAACC 60  
 ACCCATCACA GTGGACTCCG TCTGCCTCAA GTGGGCACCC CCCAAGCACA AGCANGTCAA 120  
 GCTCTCCAAA GAAGTGAGCA GCCTGGCCCC TGCTGTCGGA CCTGAGCCTC CTGGCTNNGG 180  
 GNCTGTAAAT ATGTATAGAC CTGTTTTGTC ATTTTTTTAA TAAAGTCAGT TCTGGTGGCC 240  
 CTGNGACTTT GGNAGGGNAA GGGGGAGGCC ANAAANANTA AANGGGGGGA AN 292

SEQ ID NO:6371  
 SEQUENCE LENGTH:139  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07535

SEQUENCE DESCRIPTION:  
 GATCCACCTG CCTTGGCCTC CCAGAGTGCT GGGATTACAG TCGTGANACC GCACCTGGCC 60  
 AATTTTAATA TTTTAACTGA AGATGTTTCA TATAATATTC AGCAATATAA AAATTACTAA 120  
 TGACTTTTTT GGTAAAGAA 139

SEQ ID NO:6372  
 SEQUENCE LENGTH:105  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07536

SEQUENCE DESCRIPTION:  
 GATCCTAACC GNAGGCCCAT CAATTGCAAC ATAGAGATAC ACATGGAAAG AGGGTTTAAC 60  
 AGACCCTCTC TNGGACACAN CTGTTTCTCC TTTGAGCANT ANTTN 105

SEQ ID NO:6373  
 SEQUENCE LENGTH:151  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07537

SEQUENCE DESCRIPTION:  
 GATCCAGACC AGCGTCTGGC CCAAGCCATT CANAGGTGGG GTCTGGGGNC TGGGGGTTTT 60

# EP 0 679 716 A1

GTNTCGTGAC ACTTTGTCTC AAGGAGATTC CACATAGGGA TTTNAATTAG GCTTTCTNCT 120  
TGCNAAGGCC TGTGGCATCT AANCCTGGCT N 151

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SEQ ID NO:6374  
SEQUENCE LENGTH:288  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS07538

SEQUENCE DESCRIPTION:

15

GATCTNAGGC AGATAAGAA ACTTCAACTT ATTTNAGAGA GGAGGTAGGG GATGGGGAGG 60  
TCACAGAGAA CTCTGGGTTT CTNCAGTTTA CTATGCCACA GCACCATATT TCCGGGTATG 120  
AGTTCTGAGC CCCACAATGG CCATAAGCAC TTAACCACAG ACCTAGTGAC GTATGTATAA 180  
NATATACACT AGATTCCAAA GNCTTAGTAT ACAAAGACC ATAAATATC TTATTTGTAA 240  
TTGTTAANA CTGATTACAT GTTAANNTGN TAATNTTTN NNTATANN 288

20

SEQ ID NO:6375  
SEQUENCE LENGTH:319  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07539

25

SEQUENCE DESCRIPTION:

30

GATCTCTAC CCCCGGAATG AGGACACACT TCAGGACCCA GCCCCACTGG AGTNTGGCCA 60  
AGNATTCTCC CAGCAGGAAA ATGGCCATTN CATGGACACC AATGANTGCN TCCAGTCCCC 120  
ATTCTGNTGC CCTCGAGACA AGCCCGTATG TNTCAACACC TATGGAAGCT ACAGGTGCCG 180  
GACCAACAAG AAGTGCAGTC GGGGCTACGA GCCCAACGAG GNTGGCACAG CCTGCNTGGC 240  
TCAAGTGGCC TTTTAGGTG GGTATTCTTC AGCCGTCTCT AGAATCTTN AGCCTCTTTN 300  
TNGGGCCTCA NATCTTTGN 319

35

SEQ ID NO:6376  
SEQUENCE LENGTH:166  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07540

40

SEQUENCE DESCRIPTION:

GATCTCTGTA TGNTCTGTGT GTTCTGTGT CCTGGAATTG GATGCGTGGG ACTCGTTCTG 60  
TCCGCGGAGT GCACTCTTTT TTNCAGTGTG GCCCACATAT CTGTAAATN TTTGCTGAAG 120  
AGTTGTGTCT ATATATAGAG AAAATATATA TAANCAGAGA AATAAA 166

45

SEQ ID NO:6377  
SEQUENCE LENGTH:158  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07541

50

SEQUENCE DESCRIPTION:

GATCCAATGC CCTAACTTT ACATAAGAGT TCCGGCAAGG CTGTGACTTC AACTTGTT 60

55

# EP 0 679 716 A1

GTAAC TGCAA CCTGCAGAAT CAAATTTAGG GTTATGTTTT CAGTTGTATC AGTCTTACGG 120  
CTACAAGATA TTAAGAGAT TCTTCTCTGG TTATCAAA 158

5

SEQ ID NO:6378  
SEQUENCE LENGTH:323  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

10

CLONE:HUMGS07543

SEQUENCE DESCRIPTION:

15

GATCTCACCT TGTGTGCAT CATAGAATTC AACTGGACT AAAACCTTTT AAGTGTAAGG 60  
ATTGTGAAA ATGTTTAGT CGAAGCTCTC ACCTTTATTC ACATCAAAGA ACCCACTG 120  
GAGAGAAACC ATATGAGTGT CATGATTGTG GAAATCTTT CAGCCAGAGT TCTGCCCTTA 180  
TTGTGCATCA GAGGATACAC ACTGGNGAGA AACCATATGA NTGCTGTCAG TGTGGGAAAG 240  
CCTTCATCCG GNAGGATTGN CCTCATTANG CACCNGNGAT TTCATGTTNG NGNAGAGGCC 300  
TATANTTGTA ATCAATGGTN ANN 323

20

SEQ ID NO:6379  
SEQUENCE LENGTH:318  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

25

CLONE:HUMGS07544

SEQUENCE DESCRIPTION:

30

GATCCTTCTA ATCTCCTGGA CCTCCAGGG CACTCTGGTC CCTATTCCCC AGCTCCTAGG 60  
CAGCTGAGCC GGTGCCCTTA GGGGAGGTGA CCAGGAGCTT TGGTGAGGG AGCTCTTNGT 120  
GGGGCAAAGG GCTGGACCCC TGCCAGGTCT GTGGACATGG TTATATGCCC GGNGAGGGG 180  
GGTACAGGGC CCCAGGGATG GCCCCAATC CCACCTCTGT TTATTCTGTA AACTGCAACC 240  
TATAAATAAC CTTTAGCATT CCTATTGTA ACAAATNG NNTTTNTGNA AATAAATTAT 300  
ATTTCCTAGT CTAACAAA 318

35

SEQ ID NO:6380  
SEQUENCE LENGTH:77  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

40

CLONE:HUMGS07545

SEQUENCE DESCRIPTION:

GATCTTCTCT GCCTTTATTG TTTTGCCATT TCACTAAAAT ATGTTTAGAG ATATATAAAT 60  
NCTGCTTGGA CTCTAAA 77

45

SEQ ID NO:6381  
SEQUENCE LENGTH:32  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

50

CLONE:HUMGS07546

SEQUENCE DESCRIPTION:

GATCTCATTT TACAAGAGAA TCTCTCTGCA AA 32

55

5 SEQ ID NO:6382  
SEQUENCE LENGTH:83  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07547  
SEQUENCE DESCRIPTION:  
10 GATCTCTAAG TGTAGCTGTA AATTTTGGGG TTAATTGGC TTATATTGGN CCTTTTAAAA 60  
GNAATAAAGT TTTTAATGC AAA 83

15 SEQ ID NO:6383  
SEQUENCE LENGTH:74  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07548  
SEQUENCE DESCRIPTION:  
20 GATCTATAAA GAAACATAAG CTAAAGTTG TTTATCACTG TGGTGTTAAT AAAACAGTAT 60  
TTTCAAAAAA TAAA 74

25 SEQ ID NO:6384  
SEQUENCE LENGTH:342  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07549  
SEQUENCE DESCRIPTION:  
30 GATCCAGACC TCTCTAATAT GAAGAATAAT GAGCCTTATN ACTATAAGTT TGTNAAATGG 60  
ATGACTAAAC ATAAGAACT ATCAGCCATC CCCGTTTCAG CATTCTGTAA CTCAGAGACT 120  
AAATCACAGT TTGAGAAGTT TGTNCGTTTT TCCTTCATTA AAAAGACAG CACACTGGAT 180  
GCTGCTGAAG AAATCATCAA GGCATGGNGT GTACAGAACT CTTGATTGT GCAGAATGGN 240  
TTAATGTTTC TGTTAGATGA CCTAGTATGG NATGTNACT TAGTGCTGCC ACCTGCTGGG 300  
35 ATGTTAANNG ANTGTNGGAT GCGTGGCCTG GCGGTGNNNG CN 342

40 SEQ ID NO:6385  
SEQUENCE LENGTH:118  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07550  
SEQUENCE DESCRIPTION:  
45 GATCCTGTGT TTTGAGTCCC AAAGGCCATG CCAAGGATTG GCTTTGGNTG GCTTTAATCA 60  
CCAACCCATC AACATCAAGC CTCNCAGG CCGGTTCAAA TAAATGTANT TAAATAAA 118

50 SEQ ID NO:6386  
SEQUENCE LENGTH:277  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

55

# EP 0 679 716 A1

CLONE:HUMGS07551

SEQUENCE DESCRIPTION:

GATCCAACAA ATTAACCATA TAAGCACAGA AAATAGAGAA ACACAGTTAT TGAATCTACT 60  
CTTGTCATTA ACATTTTCAA AAAACAAAAT GCATATTGTA ATATTTGGTA CATGACACTT 120  
GCATGTTGNT ATGCCTATAT NCTTGCAAAG NATTCAATGT GTACTTAGCG GCGNTTAAAN 180  
CTATGTCATG TACAACNTTT ATAAGCNTTT TTNCNGGGGT CCCATTGGCC CTTTCATCTTT 240  
CAGTAAAGTC TTTGTCAGGN AANNGTTGTN TGGTTAN 277

SEQ ID NO:6387

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07552

SEQUENCE DESCRIPTION:

GATCCAGGGA TGGGAATGGG AGTGGGTAGG AGGGGTAATG CGGTCATTGG AGTCGGGGGC 60  
TGGAACATTA TGAGTGCTCA ATAAATATAA ACTAATGAGA AA 102

SEQ ID NO:6388

SEQUENCE LENGTH:338

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07553

SEQUENCE DESCRIPTION:

GATCCAGAGG TGGGTGCAGC TGAAAGTAAA CAGAATGGAT TGCCAGTNAC ATGTATGCCT 60  
GCGCAGTTCC CTTTNNATTT GCAGAAGCTG TGAGTTTTGT NCACAATTAG GTTCCTAGGA 120  
GCAAAAAACC TCAAGGATTG ATTTATTGTT TTCAACTCCA AGGCACACTG TTAATAAACG 180  
AGCAGGGTGT TTTCTCTCTT CCTNTCTAAT ATATGGAGTT TCGAAGAATA AAATATGTGN 240  
GCAATATTTA AATTCTCAGG AATTGNCCTA TACTCTTGNG GAATGGANTT CAGTTTTCAN 300  
TCANGNTTTA CATTTNTGGT GGCTTAANAA NCNTTGGN 338

SEQ ID NO:6389

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07554

SEQUENCE DESCRIPTION:

GATCAGTCTT TTGAAATTGG GATTCTAAAT TAGAATGAGA GGAGGAGCTG CTAAAGCATA 60  
AAAATGGTAG GGGTGATTTT GGTNTTTTAT CCTAGTGACC AATGTTGACC ATTAATTGTA 120  
CATTATAAAT AATGTTTTCN TCTGGGACTT TTTGCACTTA ANGCTGGTAA TTNTNATCAT 180  
AGGGCTTCAA ATACAAAAGA NTTGTATGCG GTNTTCAGAA AATAAACATG CTCTTTGCAT 240  
ATAAA 245

SEQ ID NO:6390

SEQUENCE LENGTH:345

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07555

SEQUENCE DESCRIPTION:

GATCTTNACG CGNCTGGGGG CGAAGATTTT GCCATGGATG AGGATGGGGA CGAGAGCATT 60  
 CACAACTGA AAGAAAAGC GAAGAAACGG AAGGTTCCGG GCTTTGGNTC CGAAGAGGGG 120  
 TCCCGAGCGC GGATGNTGAG GNTTATNACA GCNTGGAGCA GGATGGCGAT GAACCCGGAC 180  
 CACAACGCTC TTTTGAAGGC TGGATTCTNT TTGTAAGTGG AGTCCATGAG GAAGCCACCG 240  
 AAGAAGNCAT ACACGTCAA TTCGCAGANT ATGGGGAAAT TAAAAACATT CATCTCAACC 300  
 TNGNCAGGCG TTCCAGGNTA TCTGGAAGGG GGTNTNCTCT NGTCN 345

SEQ ID NO:6391

SEQUENCE LENGTH:343

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07556

SEQUENCE DESCRIPTION:

GATCCCTGC TGGTCTCTGG CAGTCTCCTT GATTTTGGGT ACCATGTATA TTTCCCGCTT 60  
 TNACTTTAAC GCTTTCTAGG ATAGGGTAAG CACCCTTAAT TCAGGCACCG TCCATNAGCT 120  
 TCCTTTGCAA AGGCTACTTA TGGCCGGTCA CAATCCAGCA CTCAGACAGA GCCAAGGCAA 180  
 TATCCTCTTG CCCATGGCTA TNATGTCAGA CAGTGGATGG GCTCCAGCAA CAAGAGTCAA 240  
 AATAACTAAA GGCCTTTGCT CTCCTCTGAC ATTGAGGCCT GGGGCTTACA GTTTGGAATA 300  
 CAACATGTGA NGGTTTTTGN TNGTTGTTTG TATTATTGNA GAN 343

SEQ ID NO:6392

SEQUENCE LENGTH:185

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07557

SEQUENCE DESCRIPTION:

GATCAAAAAT TGTGGCCATC TTTGCAAATN ACTACCTNTA GCCTGTNAAA ATACATTTCA 60  
 AAAAATGTTA TGTGCAATGA ACACTAAATT NAAGAGCAGT TACAGTGTGA CTCACTCATG 120  
 TTTAAAAAAN ATCGAAGAGC TAAAAAATAC GTCTAATTTA TGTAACCCNT TGGNATGTAT 180  
 TNNTN 185

SEQ ID NO:6393

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07558

SEQUENCE DESCRIPTION:

GATCATTCTT TGTAATGTTT TGAGAGTAAT GCATACAGAA ATATAATAAA NTGTGTTGAA 60  
 ACTGCAAA 68

SEQ ID NO:6394

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07559

5

SEQUENCE DESCRIPTION:

GATCCCCATT GTGTATGANC TGAACAAGGA GCTGAAGCCC ACCAAGCCCA TGNAGTTCCT 60  
GGGTGATGAG GAAACGGTGC GGAAGGCCAT GGAGGCTGTG GCTGCCCAGG GCAAGGCCAA 120  
GTNAGGGGTG GGCTTGGGCA ATAAAGGCAC CTCGCCCAAC AAA 163

10

SEQ ID NO:6395

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS07560

SEQUENCE DESCRIPTION:

GATCAACTCC CACTCATCCT GCAGATTAA GCTTGGATGT CACCTCCCGA GGGACGCTGT 60  
GCCTGCCTCC CTCGTAGAG CAGGTGTTGT CATCTACTCA CAGAATCTGG CTCCTTCCA 120  
CAAAGCACCC CCGTGAGCAT CTGTTAACA TTGTCTCTCC ACCTAGACTG TAAGGTCCGT 180  
GAAAGCAGGG ACCACACCCA TTTGTGCTCA CTTGGGACCT ACAGCCTCTA ATCCAGAGCC 240  
TGACACAAAC CTCAATAAAT ATTTAAGGAC TGAAG 275

20

SEQ ID NO:6396

25

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07561

SEQUENCE DESCRIPTION:

GATCCGGGAC CTTCANACCC AGGGAAAGGG TGAGGGAGAC TGGGGCCTGG TCTGCTTCC 60  
CGGGCCTGAA AGCTTCCCGG AGGTTTGAG GGTGAGGAG GAGGAACGGT GGGGGNNGGC 120  
AGTCACTGNN N 131

30

35

SEQ ID NO:6397

SEQUENCE LENGTH:359

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07562

40

SEQUENCE DESCRIPTION:

GATCCATTTA AAACAAGCTG ATAGTGTTC GTTAAGCAGT ACATCTTGTG CATGCAAAAA 60  
TGAATTCACC CCTCCACCT CTTCTTCAA TTAATGGAAA ACTGTAAAGG GAAGCTGATA 120  
CAGAGAGACA ACTTGCTCCT TTCCATCAGC TTTATAATAA NCTGTTAAC GTGAGGTTTC 180  
AGTAGCTCCT TGGTTTTGCC TCTTTAAATT ATGACGTGCA CAAACCTTCT TTTCANTGCA 240  
ATGCATCTGG NAGTTTTGAT ACTTGTAAC TTTTTTTTTT TTNGGGGNN ANTNTTNNNG 300  
GGNCCAGGGG TTTTTTTTNG GAACCCCTTG GGCNNTGGCC CNNGGGTACC CGGCNAGNN 359

45

SEQ ID NO:6398

50

SEQUENCE LENGTH:61

55



SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07563  
 SEQUENCE DESCRIPTION:  
 GATCTCTGAC GATACCTGTA TGTCTTATT GTGTAAATAA AATTNCTGGT ATGAAATNAA 60  
 A 61

SEQ ID NO:6399  
 SEQUENCE LENGTH:367  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07564  
 SEQUENCE DESCRIPTION:  
 GATCCTGTGG GAAAGAGAAA GGCATCCCAG AAGTTTGA CT TGTTCNCTT TTAGAATCTG 60  
 TCTCTGCAGG AAAGAAAAGT CATTTTAATA AAAACCAAAA TAATTTATAA TAATTGTNGC 120  
 CTTTCCCTCC CCATCCTCTC CACTAAGCCA GCAACTAAAT GTATTCAGAA AACAAGTTAA 180  
 TCAAGGAGGG CAGAAGAATT TTTTAAAC TGTAAGAAAN TGTTCCTAAG TTAGATTTA 240  
 TTACCTGTCA TTAGGGCAA AANTCCAGTG TCCCAGCAC ATGGTGACCC AACTNTGTCT 300  
 CACAGTTGCA AAGTGTGTTG GAAATAAAG TTGCTTTGTG NACTTNGNGG GNAANNCNNT 360  
 NANNNNN 367

SEQ ID NO:6400  
 SEQUENCE LENGTH:379  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07565  
 SEQUENCE DESCRIPTION:  
 GATCAGGAAC CAAAAGAAG AATGTA CTTC ATCTGGTTGG GCTGGATTCC CTCTNATAAG 60  
 CCTTCCAGT TGA CTGAAAG ATGAGGCTAG GCTCTAGCAA GTTGAAGTCA AACCAGCTCC 120  
 TTCAAGAAGC TTTGAGCAGA ATGAAGTGGG GAGGACCCAG CTCCAGCCC AGGAAGCCCA 180  
 CTGTACCTGG AGCCATCTGG GATAAGACTT TGACCCATGA CTCCATATC CACAGCCTGT 240  
 CCATCCTAGC CCATCCAGT TTATCCTGTA TCATTGAGC TGGGNTTCCA CATCCTCTGA 300  
 GTTGGTAGTC CCATNTCAAG TCNTTNAATA AANGNCTNTT TGGANTATTI GANTTCACAT 360  
 TAAAAAANA ANAAAGGCN 379

SEQ ID NO:6401  
 SEQUENCE LENGTH:225  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07567  
 SEQUENCE DESCRIPTION:  
 GATCGGGGTA TGAAGTGTGC ACACGCAGCC CAACAACGGG CAGTGGTCTC TGTGCTCCTA 60  
 GGATCCAGC ACAGTTCTG GCAGGGCACC CCTGCTGGGG TTGGGGGCTG GTCTGTGCAT 120  
 AATCCTGGAC TGTGATGGGA ACAGCCAGT GCAGTCTAAA CTTCAATTGT GTTGAAACTA 180  
 CTTTAATAGA CAAAGTAATA AATCATGTTT ATCTATTGAT TAAA 225

5 SEQ ID NO:6402  
 SEQUENCE LENGTH:60  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07568  
 SEQUENCE DESCRIPTION:  
 GATCTTCAGT TGTATTTTNG TGAATATTTT AATACATCTT TTTCAATTC TGAACAAAA 60

10 SEQ ID NO:6403  
 SEQUENCE LENGTH:176  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS07569  
 SEQUENCE DESCRIPTION:  
 GATCCGGTGC TACGGGAAAC ATTTTCCTAA GATGCCCATG AGAACAGACC AAGATGTGTA 60  
 CAGCACTATG AGCATTAATA AACCTTCCAG AATCAATAAT CCGTGGCAAC ATATCTCTGT 120  
 AAAANCAAACT ACTGTAACN CTAATAAAT GTTAGTCTT CCCTGTAACC TTCAAA 176

20 SEQ ID NO:6404  
 SEQUENCE LENGTH:360  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS07570  
 SEQUENCE DESCRIPTION:  
 GATCTTCCCT GCGGCCTCTG CCCTGGCCTG CTTCCCAGCA CACACTTCTT TGGCCTAAGG 60  
 GCTTCTCTCT CAGGACCTCT AATTGACCA CAACCAACCT GGGCTTCAGC CACATCAGTG 120  
 30 GGCAGTGGAG CTGGGGTGCA CATGGGGCCT GCTCACCTTG CCCACACATC TCCAGCCAGC 180  
 CAGGGCCCTG CCCAGCTTCA ATTTACAGAC CTGACTCTCC TCACCTTCCC CCCTGCTGTC 240  
 CAGAGCTGAA CATAGACTTG CACTTGGATG TCACCTGGAG TGTNACATGG GAGTGTTATG 300  
 GCAGCATCAT ACCAAGGCCT ACTGTTGCAC ATGGGGCCAA AACCAGTAAA CAGCCACCTN 360

35 SEQ ID NO:6405  
 SEQUENCE LENGTH:32  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 40 CLONE:HUMGS07571  
 SEQUENCE DESCRIPTION:  
 GATCTNACTA ATAAATGAAG GGAAAAAGGA AA 32

45 SEQ ID NO:6406  
 SEQUENCE LENGTH:219  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 50 CLONE:HUMGS07572

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# EP 0 679 716 A1

## SEQUENCE DESCRIPTION:

5 GATCTGGTCA TTAAAAAGTG TGTGGCACCT CCCCACCACC TCTNTCTCTC GCTCGCTTGC 60  
 TCGCTCCTGC TTTNACCATG TNATGTGCCT GCTCCCCCTT TGCCTTCCGC CATGATTGTA 120  
 NGCTTCCTGA GGCTTCCCTA GAAGCAGATG TCAGCATTAT GCTTCCTNTA CAGTCTGCAG 180  
 AACTGTGAGC CAATNAACT TCTTTCCTTA TAANTTAAA 219

SEQ ID NO:6407

10 SEQUENCE LENGTH:347  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07573

## SEQUENCE DESCRIPTION:

15 GATCCAGTTA CATGTATTAT NNTTTTCCTA CCTTATGGAC TATTTTGGAG GGATAAGCTA 60  
 TTAAGACTAA GACTATGNGT GANAGTNGGG GAAGGAGCAG GAAGGGAGGA ACCTGCACAC 120  
 CACATTGGAA CNGCACACC ACATTAACAC AAAGGCAATC TTCTGGCTCG GACTGTTCTT 180  
 TACTACTGTN CTAAAGAAA ATGTTTCAATC TGCTGCAGCT ANCTAGCCTC CATCTNCTAC 240  
 20 ACCAAATACT ATTCCATGCC ATGGAAGTGC TATGCAATAA CTNTCCCAGG TAGGCACCTT 300  
 ATACCCGCTT AAANAGNCTT TAAANATNTG CANTTTTGGT NGGNGTN 347

SEQ ID NO:6408

25 SEQUENCE LENGTH:208  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07574

## SEQUENCE DESCRIPTION:

30 GATCACTCCT TATTTGCTGT TATTTTNGTN CTCTTAACCA TACATTTCCC AATGTTTAAA 60  
 GGGTGGTATT TNGAGAAAGT NAATGGGTTT TGTAAGTGCC AGCNCCTTAT ATAAGCAGGT 120  
 AGACTAGCTT TTNCCAGCA GACGCTTGTC TGTNTAGACT TCCTTAAAN AATTATCTTC 180  
 AAATAAGCA AATCTCCAT AAAANGNN 208

35 SEQ ID NO:6409

SEQUENCE LENGTH:318  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 40 CLONE:HUMGS07575

## SEQUENCE DESCRIPTION:

GATCCATAGA CTTAGCAAGT CTTGCCTTAT CTATGGAGCT CGATGGTGAG AATTGTNACC 60  
 ATGTCTGAT GTCCATAGTT CCTTCCCCCT AGATTGTTTC TTCCACGGA TTGTGTTTCA 120  
 CTGAACCATT NNATTTTAA TTACCAAAG TACTGTACTT GGCTATTTGC AGTGTTTTCA 180  
 45 AAACCAATG TTTCTNTTTT GGTGTTTTTA ATCTCCGATA CTTGGTGCAA TAGAAGCTGC 240  
 AAAGATGTGC CACTTNATCT ATGAAATGGA GTNTTGATA CCAATAAATN CTAGTTTAAA 300  
 AACANTTAN NANNNANN 318

50 SEQ ID NO:6410

SEQUENCE LENGTH:233

55

# EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07576

SEQUENCE DESCRIPTION:

GATCTGTAA GGGGTGGATA ACATAATATG CAGCTTAGGA TGCTATTTTA AGATGTATGA 60  
TATTCAGTTC ATTCACCTGA TTACTTTGGT TGCAGCACAA CTGTATATAT NGTATAACCG 120  
AAATTGATTA TTTNCATTGT CCTTAATGCA GTGATTATA ATTNGAGCAT GTTTAATAAG 180  
TTTNCCTTC TNGTAACTA GTCATTGAC TGGNAANNNA TAANATNCTT TTN 233

SEQ ID NO:6411

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07577

SEQUENCE DESCRIPTION:

GATCCACGA GGACCACTNT GTAATTGCA GGGGGCTTCC AGNNAAGACA CTGAACCCTG 60  
AAGCCGTGGT CTGGGGCAGG GTGGTGGGAG AGGTGGGCGG GGGNN 105

SEQ ID NO:6412

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07578

SEQUENCE DESCRIPTION:

GATCACCTTC CCACTTCATC CATCCCCACC CTTCCAGCTC CCCATCCATC CTGCTGAAAG 60  
CATTTCCACC ACTCAATAAA ACCTCGCATT CATCCTTCAA A 101

SEQ ID NO:6413

SEQUENCE LENGTH:332

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07579

SEQUENCE DESCRIPTION:

GATCAGAAGG AATCCGNCGA GGCAGGGATG GGTGTGCCCA TGTNTGCCTT GACGGGACTT 60  
CATCTTATAG ACTGTAAAC TGTCACACAC AAACAGGCTT TCCACCCCTG CTCTGNGNGC 120  
ACCACGCACA GNTTCCAGT TCTTAGTGTG GCTGTTTAAA GTAGAAAATC TGGGGGCTGG 180  
GTGAGGCCAC TCATGCCTGT AATCCAGGGC TTTAGAAGGC TGAGGCTGGG GGGNTTGTTC 240  
GAAGGTCAGG AGGTTCAAGG CCAACCTTG GGAACCATAG GCAACNACCC CCCATNNTNT 300  
NCCAAANTNG AAAAANCCAA AAAGGNNAAC CN 332

SEQ ID NO:6414

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07580

SEQUENCE DESCRIPTION:

GATCTACCAG CATAAATATC TNCTNATTG TCCCTATGCA TATCANTTGA GCTTCATATA 60  
 CCAGCAATAT ATCTNAAGAG CTATTATATA AAACCCCAA ACTNTTGATT ATTAGCCAGG 120  
 TAATGTGNN 129

SEQ ID NO:6415

SEQUENCE LENGTH:257

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07581

SEQUENCE DESCRIPTION:

GATCTAGAGG AATTAGTCAT GACATCAAGA AAGGAGTCTA AAGAAGAGAA AGAAAATCAA 60  
 GATGAAAGAG AAGTAAAAGA AGANGAACAA GAAGAAGAAG AAGAAGTCAG GTCAGCAGAA 120  
 ANTTCTCAA ANTCTCCAAA GAAAGGTCAC TGATTCCAAG GCANCCTGTG GNAAGANGAN 180  
 TTCAGATGTC AGTGGGAGCC TCCAGGTGGG NGNGAGCAT GCCTAANCC TGGTGGCCAT 240  
 TGTNCTGTAC TANGGAN 257

SEQ ID NO:6416

SEQUENCE LENGTH:138

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07582

SEQUENCE DESCRIPTION:

GATCCACAAG GCTTCTGTAT ACAGTTCACG GTCCTCGGCA TTGCTTCTNG TAATTTNCC 60  
 ATCCCAAAGG AGAGCTACTG TACTGACTGT ACTTGTGGAA TNCAGCGCTT CATTAAATTA 120  
 AGTTTATTAA AATGCAAA 138

SEQ ID NO:6417

SEQUENCE LENGTH:331

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07583

SEQUENCE DESCRIPTION:

GATCTAATGG GACACGGCCA GTGCCTAGGG GTGCCAAGTC CAAGGCCTCC CACTGGGNGT 60  
 AATCGCTGAG AAGATGCCAA TTTTTCATCC ACCGGCTGCA CAGGCACAAA CTCCCCACC 120  
 CAGGACGGCT GTNATGAGGT GGCCCTCCCT NTNAACCCTG GTCCCTGGAG TCCCCAGCAC 180  
 CTGGGGCCCT GGTGGGGCTG ATGTCACAGG TGTTTACTGT GCTGCTGCAC TGGTCTATG 240  
 NCAGCTTCAC CCCATGTGGG GACCACGGAA GGNACAATNC CTTACCCCG NTTGCCGGGN 300  
 CCGTGCGGTN NNCAAGANGG GNCAAGGANG N 331

SEQ ID NO:6418

SEQUENCE LENGTH:337

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07584

## SEQUENCE DESCRIPTION:

5 GATCCAGCTT ATCCTTTAAT TTCAAAGTCC ATTCTTGGGG CTGGTGGGGA GGCAGGAGAA 60  
 TACCCCTCCC TAAGCCCTTA GTGTGTGCCG AGCTTGCTTT GTNATGTTGG CAGGGGAGGG 120  
 GAGACCTGGG TGGTGACTGA GTTCCCTTTA TCAAACCTT CAATGGGCAC AAAATTNAGT 180  
 GCTTGATTTT ANGGTTTAT TTTTATGA ATGTCCAAA TCTGTGTTT CCCNNTGCCC 240  
 TCCCAAGANN TGTGTGGGCC AGTTGAAAGT GTCTTGGTTT TGTGGTCAT CTTTCCCTN 300  
 AATTTCTGGA GCANGNCCC TGAGNNCCNT GCCANAN 337

10

SEQ ID NO:6419  
 SEQUENCE LENGTH:350  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

15

CLONE:HUMGS07585

## SEQUENCE DESCRIPTION:

20 GATCATGGAT GTAGCATACA CCAAAATCCA CCGAGACCTT TGCAAAATNA GGCTACTTGT 60  
 TTNATTTTGC CAGATTATCA TGGGAGAGTC TTAACTAGT NCTGAATATT TGTAAGTCTG 120  
 AGTACTTCAT AGAATTATAA AGAAGGTACA GCTGACCCCT TCTCACCATG TNGTAAATAT 180  
 TTCTGAGAC TGGGTGCAGT ACTGAGGGAT AATAATCTCC TGNTTTATCA AATCCTGACT 240  
 GTCTAGAGCA ANTTGTACAC TCTCTTTGTG AATGGTCCTG TAACGTGTAT GNACACATTT 300  
 NTGGGTGCCT TAGANGTNGT NTTTTNCATG TGTGCTAATN TGCAGTTTCN 350

25

SEQ ID NO:6420  
 SEQUENCE LENGTH:362  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07586

30

## SEQUENCE DESCRIPTION:

35 GATCCAGGGT CTNAACCGCC GTGGGACGAG GAGGGCATCC CGGCCACAGC AGGGGCCGAG 60  
 GAAGAGGAGG AGACAGAGGG GAAAGGGGAG CCGGCCTGAC CCACACCCCC GGCCATCGCT 120  
 CCCTGGGCCA GGTTTAGAGC AGGGAGTTTG GCTGGTGCTG GGCTGAGCC AGGGGGCCGG 180  
 GACACCCTTG TTTCCGGTGG TCTTCCCGTT GTGGGAGCAG GTNGAGGGTG GAGACCTAAA 240  
 CTTTGGGGTC CAGCTGCCTT CAGCCCNCT CCNCCAGACT AACAGACCCT TGGAGGCAGG 300  
 GGCTGTGGAA ATAAATCTTT GCCTGNTGGG NTAAAAAAA ANTATNANNT GTGNNNGTT 360  
 GN 362

40

SEQ ID NO:6421  
 SEQUENCE LENGTH:114  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07587

45

## SEQUENCE DESCRIPTION:

GATCTNCTCT CCCACCCACA CTTATCTCCC CCAGGGCCAC TCCAAAGTCT ATACACAGGG 60  
 GTGGTCTCTT CAATAAAGAA GTGTTGATTA GACCTGAATT TCTCCACCTA TAAA 114

50

SEQ ID NO:6422

55

EP 0 679 716 A1

SEQUENCE LENGTH:62  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
5 CLONE:HUMGS07588  
SEQUENCE DESCRIPTION:  
GATCTTTGCT ACTGGAGTCC TTAAACAACA CCTATAACGA TAAAAAATTC CTAATTNTTA 60  
AA 62

10 SEQ ID NO:6423  
SEQUENCE LENGTH:96  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
15 CLONE:HUMGS07589  
SEQUENCE DESCRIPTION:  
GATCCTTCAT ATTTAATTAA AAGTGTTTCAT TCAGGTAAGG TGTATGTTGA AATTTNCCA 60  
ATNATCTTAA TAAAACCTGG CAATTTAAAA NCCAAA 96

20 SEQ ID NO:6424  
SEQUENCE LENGTH:88  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
25 CLONE:HUMGS07590  
SEQUENCE DESCRIPTION:  
GATCTATTTA TTTAAGTATG TAGTAAACAA TATCTNAAAG TGTCCGATTC ACTACTTGTA 60  
AATTAACAAA GTNATGATTA ATGTGAAA 88

30 SEQ ID NO:6425  
SEQUENCE LENGTH:314  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
35 CLONE:HUMGS07591  
SEQUENCE DESCRIPTION:  
GATCAGAAGA AGCTACAGTT TTNTTTTAAA CTTGAAAAAA AATTAAGAAG TATTAAGGAA 60  
AAAGCTTAAT ACTCTGGAAA CCAGACATCT GGTCTTTCTC ATGCGTAGGG AGCAGTGTA 120  
ATGAAAGTGA AGTCAAACGG ACAGTTTTTT NCTGCATTAT GCACAAGGTG TTTTAAATG 180  
40 TCAGCTTAAG GTTTAGATGA NGATAATCTT TAACTTTGTT TACAATTTG NCTATTTNGC 240  
ATTATCCCCC TTTTCCATA AAANNTAANG TGAATATGTG TGCATATNNN TNTNGAGTCA 300  
NAATTAACT TATN 314

45 SEQ ID NO:6426  
SEQUENCE LENGTH:91  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
50 CLONE:HUMGS07592  
SEQUENCE DESCRIPTION:

55

GATCCTGTGG TGTGTATAA AAATGAACAG CTAATAATT ACCCATGACA AGATTAAAGC 60  
 AAAAATAAAC ACAAAGTTGT TAGACTTTAA A 91

5

SEQ ID NO:6427  
 SEQUENCE LENGTH:122  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

10

CLONE:HUMGS07593

SEQUENCE DESCRIPTION:

GATCTTGTGC TATACTTTT AAAGCCATAC AAATAAGAGT GCTAACTNT GGACTTAAAA 60  
 GTAGGTGTNT AAATATTTT AATCAGTATT ACTTGAAAA TAAATATAA CAAACCCATA 120  
 AA 122

15

SEQ ID NO:6428  
 SEQUENCE LENGTH:293  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

20

CLONE:HUMGS07594

SEQUENCE DESCRIPTION:

GATCCTAACC CTGCAGGGC TCAGGGGTCA GCAGGGACCC ACTGCCCCAT CTCCCTCTCC 60  
 CCACCAAGAC AGCCCCAGAA GGAGCAGCCA GCTGGNATGG GAACCCAAGG CTGTCCACAT 120  
 CTGGCTTTTG TGGGACTCAG AAAGGGAAGC AGAACTGAGG GCTGGGATAT TCCTCATGGT 180  
 GGCAGCGCTC ATAGCGAAAG CCTACTGTAA TATGCACCCA TCTNATCCAC GTAGTAAAGT 240  
 GAACTTAAAA ATTCAATCAA ATGAACAATT AAATAACAC CTGTGTGTTT AAA 293

25

SEQ ID NO:6429  
 SEQUENCE LENGTH:209  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

30

CLONE:HUMGS07595

SEQUENCE DESCRIPTION:

GATCTGAATT TGTAAGTTAT TAATGTGAAA GGGGGAGCAG GAAGCTCCCC GTTTCACAA 60  
 AGGGGGATTT GTTTCACAA AGTTCAGTGT AAATACTGTG AGANTNGANT TCTGAAAAGG 120  
 TCATATTTAG TGATTTCAAA AGCACACATT TAANTGANGA CTGACTAAAT AANAGGTACC 180  
 ACACACTTCT NGGTTGGTTT CATTCCAAA 209

40

SEQ ID NO:6430  
 SEQUENCE LENGTH:200  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

45

CLONE:HUMGS07596

SEQUENCE DESCRIPTION:

GATCTCCCTC AGTNTGCCCC CAGCCCCCAA ACTCCTCCTG GCTAGACTGT AGGAAGGGAC 60  
 TTTTGTGTTT TTGTTGTTT CAGGAAAAA GAAAGGGAGA GAGAGGAAAA TAGAGGGTTG 120  
 TCCACTCCTC ACATTCCAGC ACCCAGGCCT GCACCCACC CNCACTCCC AGCCCGGAA 180

50

55



TAAAACCATT TTCCTGCAAA

200

SEQ ID NO:6431

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07597

SEQUENCE DESCRIPTION:

GATCTNATTC CAGGATTGCT CAGAAATTGG AAAAAAATC ACCTGTGCTT CCCAAATTTA 60  
 TTTCCCAAGA CAAAGATGTC TATAGCACAG AAAAAATGC ATGANTTAAA AAATCAAGAT 120  
 GTATTATTAA A 131

SEQ ID NO:6432

SEQUENCE LENGTH:42

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07598

SEQUENCE DESCRIPTION:

GATCCTGAGC TGTCCCATTA AACATGGCCC TGTCTCGGTA AA 42

SEQ ID NO:6433

SEQUENCE LENGTH:332

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07599

SEQUENCE DESCRIPTION:

GATCCACTAG ACAGTTTNC A GTTGCTTGG AGGTANCTGG GTAATCAAAA ATGTTTAGTC 60  
 ATTGATTCAA TGTGAACGAT TACGGTCTTT ATGACCAAGA GTCTGAAAAT CTTTTGTNA 120  
 TGCTGTTTAG TATTCGTTG ATATTGTNAC TTTTCACCTG TTGAGCCCAA ATNCAGGATT 180  
 GGTTCAGTGG CAGCAATGAA GTTGCCATTT AAATTGTTC ATAGCCTACA TCACCAAGGT 240  
 CTCTGTGTCA AACCTGTGGC CACTCTATAT GCACTTNGGT TTA CTCTTT ATTNCAAATA 300  
 ANTATACTAA AAGNCTTTAA ANNANGNNNA NN 332

SEQ ID NO:6434

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07600

SEQUENCE DESCRIPTION:

GATCAATACG GGTCTATTT NATGTCAACT GAACACTGTA GGGTACCTTC CAGTCTTTT 60  
 CAAGATTGTN AAATTGAGAC AAGTAATTGA ATAATTTGTC CTATTTTAAT TTTAAAAA 120  
 GTGAATGGNC TGAAATGTTA AATGTGAATG TNCATTTCTN AATTGCAACT TTNCTACTGA 180  
 GTGTTTGAC TATACTTNCT GGAATCTNAT TTAACAAANN TANN 224

SEQ ID NO:6435

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07601

SEQUENCE DESCRIPTION:

GATCAAAAAG CACAAAGAGC TGGGGCAGAG GCAGGAAGCA GGGGCCCTCC TGGCAGCTCC 60  
TCTNAGTGGG GAGAGGTTGG GCAGTGAGTG AGGGACCCCT AATGCAGGGN CTAGAAGCCT 120  
CANTTTCCCC NTTTTACCCT TCCACACAAT AGCCTCTGTA GGNNAGGCTG CCCCATNCCA 180  
CCNGGNTN 188

SEQ ID NO:6436

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07602

SEQUENCE DESCRIPTION:

GATCTAGGAC TAANACTTAA AATGTGGTTG GAATCTCACT CAAGGCCTAC CCACCTAAAA 60  
CTGCGTTCTA GCAATTGCAT GCTGACTGCA CCTATGAGTC GTAAGNCTGT AGTTGCAAAG 120  
TGTGTCTAGT TTANATTCT TTCTAAATAC TGGTACGGGN AACAGGCATT CCAGNACTTG 180  
TGGCTTGCTG GNGGTGGTNT GAGTNATGNG GAATCTTGGG AAGGGGTTCC TGCCCCCTGGG 240  
ANTTGGGGGG TTTTNN 256

SEQ ID NO:6437

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07603

SEQUENCE DESCRIPTION:

GATCCAGGGC CTTTNAACA TCCCCAAAGT CATGGCCATA CTCACCATTG GCCAGTTTCT 60  
AACATCTGTT TCAGGGTATC CAGCTGTAGA TGTTCTTATC CCCCATACTT GTGAGTTCTT 120  
GGGGTTGCTC ACAAATACTA GGGGTTTTTG TTGTATTTT AACAANTATA TCCTAATGTC 180  
ATATTNATNC TCTTTTGTA CTGCTGGTCT TTACANTAAA GGNGTCATCT GCCTTTCAAA 240

SEQ ID NO:6438

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07604

SEQUENCE DESCRIPTION:

GATCAGCACC CTTCTCCACA TCCACATGAC TGGTTTTTAA TGTAGCACTG TGGTATACAT 60  
GCAAACATCC GTTCAAAATC TGAGTCGGAG CTAATAATAA AAAATGAAAA ANCAGAAATA 120  
AGAAA 125

SEQ ID NO:6439

SEQUENCE LENGTH:321

# EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07605

SEQUENCE DESCRIPTION:

GATCCGCCTG CNTCGGCCTN CCAGAGTGCT GGGATAAAAG GTGTGAGCCA CTGTGCCTGG 60  
 CCACTCCCTT GAGACCCAGT TTCCACGTCT GTNAAATGGG GGAATACCCA CAGTGAGAAT 120  
 TAGATGAGAT AGATGCATTT NAAACCACAA ATCGGGGTGC CCACCTGTGG TGGGTAGTTA 180  
 GGGTAGTGTT TACAAAGTGC CCCAGCAGAG ACCCCCTTGA CTAACITTTA TTCTTCCATC 240  
 TTTTCCACA GGTGGCAGCT GCCAACAGA AGCATTAGAA CAAACCATGC TGGGTTAATA 300  
 AATTGCCTCA TTCGGTANTG N 321

SEQ ID NO:6440

SEQUENCE LENGTH:123

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07606

SEQUENCE DESCRIPTION:

GATCTTTGTC CAGAAAATAA AGCTTTCTGT TGATTTTTTC TTTAAGCAAG AGGTAAGGAA 60  
 ATATGCACTT AAGANTATGT GTACAAGAAA ATAGTTTCTA AAATAAATTG AAATGTCTGC 120  
 AAA 123

SEQ ID NO:6441

SEQUENCE LENGTH:284

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07607

SEQUENCE DESCRIPTION:

GATCCACTCT GGACACTCAA CAAGACCTGA ACAGGATTTN CCTACCTGGT CCTTACACTA 60  
 CATCATCATC ATCTCATGCC CACCTGCCCC CACCCAGCAG AGCTTCTCAG TGGGCACAGT 120  
 CTCTTACTCC CATTINTGCT GCCTTTGGNC CTGCCTGGCC CAGCCTGCAC CCCTGTGGGG 180  
 TGGAAATGTA CTGCAGGCTC TGGGTCAGGT TCTGCTCCTT TATGGGACCC GACATTTTTN 240  
 AGCTCTTTGC TATTGAAATA ATAAACCACC CTGTTCTGTG GAAA 284

SEQ ID NO:6442

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07608

SEQUENCE DESCRIPTION:

GATCTGGTAC GNGGTGGACG TCATGGCCCG ANATGCCCCAC GGNAACACAG CGCTGACCTA 60  
 CGACCGGCAG GCCTCCAGCC ATGGAGTGCA TCAACGTGCT TCTNCAGTAC GGCTGCCCCG 120  
 ACGNGTGTGT ATAGTATCTG TTTTATTTGA CTGCAGTCTC CTTGGTGCAA AANCAAANTG 180  
 GGGAANTTAA GGATAACTCA GNATTTCAAA AGGAN 215

SEQ ID NO:6443

EP 0 679 716 A1

SEQUENCE LENGTH:61  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
5 CLONE:HUMGS07609  
SEQUENCE DESCRIPTION:  
GATCTNAGAC TTCTCAGTC CAGAACTGTA AGCAATAAAT GTCTGTTGTT TATAAATTAA 60  
A 61

10 SEQ ID NO:6444  
SEQUENCE LENGTH:75  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
15 CLONE:HUMGS07610  
SEQUENCE DESCRIPTION:  
GATCCTTGCT CTACCTGGCT AGAGTTTCTN CTCATCAGAG CACTGGGACA TTAAACCAAC 60  
CTTTTACAAC ACAA 75

20 SEQ ID NO:6445  
SEQUENCE LENGTH:207  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
25 CLONE:HUMGS07611  
SEQUENCE DESCRIPTION:  
GATCTCAGCT CAGAGAGAGA GCATGAGGTC TTTTCTAACT GTCAGGAAAC AGAGCTGTGC 60  
CCAATTCCAC TCAACTTTTG GCACAACTGT TAATCTGGGC CTTACCTAC CTAAACTGA 120  
GTTTCTGCAA GCATAGCATT TTAGACACCC TGAATAACC TTTTGGGAAT GATGCCACAG 180  
30 AATAAAGTTC ACTCTTAACT TTTCAAA 207

35 SEQ ID NO:6446  
SEQUENCE LENGTH:307  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07612  
SEQUENCE DESCRIPTION:  
40 GATCTGATAG TGGTAGGTCT ATCAGGAATA TCAGGNAAAA TNCTTTTAAT GTTGTGGCA 60  
AAGTCAATTC CTATCATTTG TACTTGACAC CAGCTACCTA GCAGGCTCAT TGTGAATTC 120  
AGGTTTCGCC CACGTTATTT ATATAAGTA TCTCAGTGTA ATATAGGGAG TTGCTGGTTA 180  
TTTGAAAATA GTAACAAAGG TAACCCAAAC GAGAACTCC ATTTCCATAA TTNGCTTTCC 240  
TGAAAGTCAG GCATGTCTTT GAGGACAGGT TTTGGCAGTA TTNNTNTGT GCACAGGNGG 300  
45 GAAATTN 307

50 SEQ ID NO:6447  
SEQUENCE LENGTH:219  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

55

CLONE:HUMGS07613

SEQUENCE DESCRIPTION:

5 GATCTGCCTG TTTATTTTGG TGGGTGGTCT TTCCTCCCTC CCCTACCACC CATGCCCCC 60  
 TTCTNAGTCT GCCCCTGGCC TCCAGCCCCT AGGGGACTAG CTGGGTGGG GTTCCTCGGG 120  
 CCTTTTCTCT CCTNCCTCTT TTCTTTCTGT TGATTGTCGC TCCAGCTGGC TGTATTGCTT 180  
 TTNAATATTG CACCGAAGTT TTTNAAATAA AATTTTAAA 219

SEQ ID NO:6448

10 SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07614

15 SEQUENCE DESCRIPTION:

GATCTGGTGT AGTATATTTT ATCGCATTTT CTTATATTAA AAAATGTCTG CATGATTACA 60  
 TTTTATTTCC TTTGTAATTT ACATTCAGA ATAGTGTATT GCTATATGGG TGCCAAGATT 120  
 GANTATGAAG AACCCGAGTN TTTGTAGTAT TATAGTTTAA AGCAAATCTG TGTGGTGATA 180  
 CAGCCATAAG ANTGGGGCTT ATATAANCTC TGTACATGTA AGATTTTGTG CAGAGAATTT 240  
 20 TTAAC TTAT AAATTGTATA TGANCATGTA NN 272

SEQ ID NO:6449

SEQUENCE LENGTH:300

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07615

SEQUENCE DESCRIPTION:

30 GATCCACCCG CCTCAGCCTC TGAAATTGTT GGGATTACGG GCGTGACACN CGCGCCTGGC 60  
 ATGTATATCA TTTTNATTG TGTATTTTGT AATTTTGTG TGTNAATTGA TTTTAAATAT 120  
 AGTTTTCAT TTAAC TTGTT AGTTTCTGTA GTGGCAAATC CTGTGTTTG CAATATTGGA 180  
 TTATTTCTCC ATAAGAGTTT CACATTTCTC CTGCTAGGAA ATCCATGGGG AATATTGGAA 240  
 TTGGGCTAGT TTAATNNNA TNNCTAATGT TTAANGGTTG TGAAAAANAT TGGCGNCAAA 300

35 SEQ ID NO:6450

SEQUENCE LENGTH:286

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS07616

SEQUENCE DESCRIPTION:

45 GATCTCCACT TTNCCAAAGG GCTGCNAGAG GTGATTGANA AGAACCGGCC TGCTGATGTN 60  
 AGGGCGTCCA CTGCCCCAC ACCGTCCACA GCAGCTGTCT GAGCCCTCAA TCCCAAGCT 120  
 GGCAGCTGTC ATTCAGGACC CCAACCCCTC TNAGCCCTC TTTCCCAACA TTCATAGCCT 180  
 GTAGTGCCCC CTCTAACCCC CAGTGCCACA GAGAAGACGG GATTTGAAGC TGTACCCAAT 240  
 TTAATTCCAT AATCAATCTA TCAATTACAG TCCGTCCACC ACCAAA 286

50 SEQ ID NO:6451

SEQUENCE LENGTH:97

55

SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07617  
 SEQUENCE DESCRIPTION:  
 GATCTGTGCA GAGAGAGATG GCAGCCACTC CCTTCAGTCC TCCCAGATTT CTGTAGCTAT 60  
 TTATGTAGCA GGCTCAATAA AATGTCTTCT CTCTAAA 97

SEQ ID NO:6452  
 SEQUENCE LENGTH:113  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07619  
 SEQUENCE DESCRIPTION:  
 GATCNNAGGC ATNNTTCTT CAGTCAGAGC ATTCAATCCT CAAGCCATTC ACACATTAG 60  
 GCCTCATGCT TTNTCTGTC TTAATCACA TCCATTTCCT AACTCATTG AGN 113

SEQ ID NO:6453  
 SEQUENCE LENGTH:118  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07620  
 SEQUENCE DESCRIPTION:  
 GATCATAAGT CATTCCCTC CCCTTCAGG CCTCCTGCTA TATTTGGGGG ACCTGACTNG 60  
 NTTNGCTGGA GTCCCATGAG GATGTGGGCC CNTTAATAAN GGATAGCAAA CAGGCAAA 118

SEQ ID NO:6454  
 SEQUENCE LENGTH:233  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07621  
 SEQUENCE DESCRIPTION:  
 GATCCCCAAA TCCAAGGATG CTTGGAATCC CTTATATAAA ATGGCATGGT ATTTGCATAT 60  
 AACCTACATG CATCTTCAAA TATGTTAAAC CATCTCTAGA TTAATTATAA TACCAAATAC 120  
 AATGTAATGC TATGTAAACA GTTGTTACAA TGGATTGTCA AAGGCAAGCT CTNCTTGCCC 180  
 ANTNCGGGCC AANTGNNGG TNCATGAGCA AATTAANTNN NTGCTGGTAT TTN 233

SEQ ID NO:6455  
 SEQUENCE LENGTH:253  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07622  
 SEQUENCE DESCRIPTION:  
 GATCCGAATT TCCTGCTCTA AACCTCCAC TGCTTTCTGC TGTTTCCACT GAGGAAAGAG 60  
 GATGTGTGTC ATTAAAGCTT TGTGGGACC TGTCACAGTC AAGGTGGGTA TAATTATGTT 120  
 TAATTTATTG AAGTGTTTCT GGCATCGTC TTTTCAAAT TCATATATNC TATCCAGAAG 180

ANGTGNATTC ATNNNCATT ATNAAAAAAN ATAAAAATATT ACCAGATAAA GCTCANCAC 240  
NCNCTCTNCC CCN 253

5 SEQ ID NO:6456  
SEQUENCE LENGTH:44  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07623  
10 SEQUENCE DESCRIPTION:  
GATCTTTCCT ATCAGTGTA TAAAAACTCA TATTATGGCA GAAA 44

15 SEQ ID NO:6457  
SEQUENCE LENGTH:320  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07624  
SEQUENCE DESCRIPTION:  
20 GATCAGGCAG GGTGCCATTN ATTGTCTTTC TCTCCTAGCC CCCTCAGGAA AGAAGGACTA 60  
TATTGTACT GTACCTTAGG GGTTCCTGGAA GGGAAAACAT GGAATCAGGA TTCTATAGAC 120  
TGATAGGCC TATCCACAAG GGCCATGACT GGGAAAAGGT ATGGNAGCAG AAGGAGAATT 180  
GGGATTNAG GGTGCAGCTA CGCTCACCCT AAACCTTTGG TGGCCTGGGG TATGTCTTGA 240  
25 GGCCAGACT GTTAAGCAGG CTCTGCTGGC CTGTTTACTC GTCACCACCT CTGCACCTGC 300  
TGTCTTGAGA CTCCATCCGN 320

30 SEQ ID NO:6458  
SEQUENCE LENGTH:179  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07625  
SEQUENCE DESCRIPTION:  
35 GATCCAAATN AGAACAGATT GGTATTGCA GGTATCACAG CCTAAAGAAA TTATCTTTTT 60  
GCAAAAGAAA TATTAAATGA TTTAGCAGTC TCCACGTGTG TTAATGTTTC AAACGTGTAT 120  
CATAATGTGT ATAATTGTGT AACAAAATTG TCTACAATAA ATCTNTTGGT ATTTGTAAA 179

40 SEQ ID NO:6459  
SEQUENCE LENGTH:337  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07626  
45 SEQUENCE DESCRIPTION:  
GATCCATTG CCCCAGGGG ACAACGGGGT GTNAGNGGAG TAAGGGGTGG AGGTAGGGGC 60  
CAGAGGGGCT TACACGATAT CCCATACCTT TAATGCCTTT GGCCTTCCAT TCTNATTTCN 120  
CTNATGAGAA TATTGCTGGC CCTGCTTTCC CTGGTAGGTA TTTGCCAGGC CCAATGCTTT 180  
AACCTTAAGC TGATACTTTG CTTTAGATGT CAGTCTCGTT ACCAGCAGCC TTTTGACCCA 240  
50 ACTACGGGCG TCTATATTTA AGTNGAGGGA TTTTNANCCA TTGTGCATGG NAAAAAGNTG 300

55

TTCATGGGTA CNATNGTAAG NAAANNTAAA ANTTTTN

337

SEQ ID NO:6460

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07627

SEQUENCE DESCRIPTION:

GATCGGTTGN GNCATGGAGT GGGGGCTTCC AGGTGGACCT NCCCGGCACA CATTCCATT 60  
NTTGAGCCCC AGTCCTGCCC CCCACCCNAC CCTCCCTACC N 101

SEQ ID NO:6461

SEQUENCE LENGTH:138

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07628

SEQUENCE DESCRIPTION:

GATCCTTCTT GGTAGTATT ACTTGTNCCG GAGCAATTCT NATTCCTCGT TTAGACATTG 60  
NNATTTCCTT CGTTGGAGCT GTGAGCAGCA GCACATTGGC CCTAATCCTG CCACCTTTGG 120  
TNGAAATNCT TACATTTN 138

SEQ ID NO:6462

SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07629

SEQUENCE DESCRIPTION:

GATCTNATTA GNNTAGTAAT GTTTCCCTT TAAACAGATT CATCATTATC CCTAAAGTAT 60  
TGCTGTATTA ATACTGTCTT CTAGAAAGTA TACACCAGTN CCTACTTTCC TCCGATATCA 120  
TTAGCTGTTT TCNGAAACTN AATTCCTCT TCAGAGATTN CTCATATGTN TN 172

SEQ ID NO:6463

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07630

SEQUENCE DESCRIPTION:

GATCCACAGA GTTCATAGGC ATGATTAAAT GGTAGTAGTT TTCCACCACG AAGTTTGGGA 60  
ATAATTTGTC ACAAAGCAAT ANGGAATTA GAAAAATAAC CTTTCAGAAG GAGACAGTTT 120  
CTCCAAAGCT TGGGTACTTT CGCTTAATAT TAAANAGTGG ANGGAATTT TTNCCTGCCA 180  
GNCAAAAGGC AGNAGGTGTA TTTCTACACC ATGGNTAGGC AANTNNTTT TTNCCTAN 239

SEQ ID NO:6464

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid



# EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS07631

SEQUENCE DESCRIPTION:

5 GATCTGCATT TAGCAATGTG ATGTCAGTAA ATGGACATAA CAGGATTGTT GTAAAGGTTG 60  
GGCATGATGT ATGCAAAGTA CTGGCCAGGG TAGACTAATA ACTGATGGCA TTTATATGCT 120  
GTGCTGGAAT ATTGTTACCA AGCTGATGTG CCGTTCTCAC CCNGGGNGAA TACTGGTTTT 180  
GTCATTTTCAT AAATGATATT TTTATAANTA AAA 213

10 SEQ ID NO:6465

SEQUENCE LENGTH:329

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15 CLONE:HUMGS07632

SEQUENCE DESCRIPTION:

20 GATCTGGCCA AGAATGAGGC CCTCCCAACA CTTTCACTCC CTCTCCAAGC CTTGATGGGA 60  
CCTCCACTTA TTTAGGCCTN ATGTGCTTTG AAGAAGCTTT GAGAGCCAAT NTGTCTTCCA 120  
CGGGTCTCTT TTTTGCTACA AGTAATCAGC CCCATGTNTT CTCTTAACT GAGAATTGCA 180  
CCGGGGGCAA TTCCTGTTTT CTAAGGTGGT CTCTGCTGCT ATTTAACAAC CCAGAGTAGG 240  
CCTCTGTNAG GCTTCAGTGG CCTCAGAAAC CAGAGGGTCC AGATAGGGGG CCTGCTTGGG 300  
CCCTCTGCTG NCAAACTGCT TAAAANTTN 329

25 SEQ ID NO:6466

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS07633

SEQUENCE DESCRIPTION:

35 GATCCACGTG TGTGGCCATA TTGTAACACA TTTTCTGCA AATNACCTCT TTCATTTAAC 60  
AGCCCTTATT CAATGGCCTT TTNCTTTTTT AGTAGTACAT ACACATCTGT GTCATTNGTT 120  
GAATGACGNC ATGAATGTTT TGTAGATAAA ATATAATTAA ANGNTTTTAA GCATTTCTNA 180  
CTCATAGATA TTNATGTTAG CACCAAATTT GNTGTGCAAT GANCCTCCCT ANATAN 236

SEQ ID NO:6467

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS07634

SEQUENCE DESCRIPTION:

45 GATCTATGCC TTAGTGTGTT TTTTNTTGTC TGCTTTGATG TAAAAGCAAG AGTATTTGGA 60  
GCAAGAAGCT GCAATGCGCC AAATACACAN TAGGCCTTTC NTTTATCATT CATACGACAT 120  
TTCTGGTTTA GGTGTATGTA GTTGGGCCAT GTTACTTGTC CAGAGGAAGA GNCTAAAGAT 180  
ATACGGNTAA TTTTNTAGTC CNTAATGCTG TTTTGNTTAC NTNCTNTCAN GGTTATTTN 239

SEQ ID NO:6468

50 SEQUENCE LENGTH:82

55

SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07635  
 SEQUENCE DESCRIPTION:  
 GATCGAGCAA TTGCAATCCA GCCTGGGCAA CAGAGCGAGA CTCCATTTC AAAAAAGAAT 60  
 CAATAAAAAT GTTAAAGCA AA 82

SEQ ID NO:6469  
 SEQUENCE LENGTH:348  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07636  
 SEQUENCE DESCRIPTION:  
 GATCCGTAAG GCCATGACCA AGGAGGCCAT CCGAGAGCAC CAGATGGCCC GCACTGGCGG 60  
 CACGAGACAG ACCTGTTCAC CTGCGGCAAG TGCAGGAAAA AGAACTGCAC CTACACACAG 120  
 GTGCAGACCC GCAGCTCTGA TGAGCCCATG ACCACCTTNN TTGTCTGCAA CGAGTGTGGA 180  
 AACCCTGGA AGTTCTGCTG ACCCCTTGTG TAGATGTGCT GCAGCCTTNG GCCTTCNCGG 240  
 GCCACGTTCT TCGTTGACAN AGGTTNTNTT GGGGNCCCCT AGGAAGGCGG TATGTNCCTN 300  
 GCCNTTNAAN CTGNCTGGN TTGGATTGNA NCTTTTTTGN CCTTTTTN 348

SEQ ID NO:6470  
 SEQUENCE LENGTH:178  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07637  
 SEQUENCE DESCRIPTION:  
 GATCGTGAAA TCTAAGGCTG CTTGATGTTT TGATGCTTGT NAATGCCGTC GTGCTCTGTG 60  
 ACTCCACGAA ACGCCAAGGA GCTTCTTCCG GACGNCTCCT CTTCCTCTGT AACATACGTG 120  
 TGAATAGTCA AGGTTTAATT TTNCTTTAAT CTAATAAAGT CGAAGTGGGA CTNTTAAA 178

SEQ ID NO:6471  
 SEQUENCE LENGTH:50  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07638  
 SEQUENCE DESCRIPTION:  
 GATCCAGCAC ACCTCCTCGG TTTTTTTTTC AATAAAAGTT TAGAAAGAAA 50

SEQ ID NO:6472  
 SEQUENCE LENGTH:108  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07639  
 SEQUENCE DESCRIPTION:  
 GATCTCTGTG AAACAAAATN AAGCAAGAAC GGAGACGCTG AATAGTTTTA TTTCTNTATT 60

AGAAACTGTG ATTGGAACAA TTGAAGAAAT AAAATCATAA CAGAGAAA

108

5 SEQ ID NO:6473  
 SEQUENCE LENGTH:210  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07640  
 10 SEQUENCE DESCRIPTION:  
 GATCTGAAGA AAGCAGCAAT ATCTGTNACT AGAGAACATT CCCATGTTTT TAAACTCTTC 60  
 ANTTCTTAGA TGCATTAAAN TTCTTAATGC AAATNACGTA GCAATTTGAA AACTTCTCCG 120  
 TATTACTNGT GTTTAAAATG TCTTGCTTTA AATACAANNC AAATGGTAAA GGGGATTATC 180  
 15 TTTGGTTTAG ATGGTTAANT ATNATTTNGN 210

SEQ ID NO:6474  
 SEQUENCE LENGTH:307  
 SEQUENCE TYPE:nucleic acid  
 20 TOPOLOGY:linear  
 CLONE:HUMGS07641  
 SEQUENCE DESCRIPTION:  
 GATCAGCAGG ACTGTCTCCA GCACGGAGCT GACACTGTTC AGCTGCCTCA ACTGGTAGAC 60  
 25 GCTCCCAAGA AGTCAGAGGC AGCNGTCGGG GCGGAGGTGT CCATNACCTC CCCAGGACAG 120  
 AGCAAAAAC TCTCCCTCAA GAACAGAAAC GTTTTACCNN CTATTGTATG ACCTTTGCTG 180  
 AGGGTATGTC CTGCTCCTTT CCACCAGTGA TTTGTATTAA GNCAGCACTT ATATTGTACA 240  
 ATACTTCAGN CTGTTTTTTT TAAATACATA AAACTTTATG TTAaaaaact CTATTANCAT 300  
 GGGCAAA 307

30 SEQ ID NO:6475  
 SEQUENCE LENGTH:140  
 SEQUENCE TYPE:nucleic acid  
 35 TOPOLOGY:linear  
 CLONE:HUMGS07642  
 SEQUENCE DESCRIPTION:  
 GATCACAGGT TAGGGGTTTC TCTAGATGGG GGTTCGAAA TTTGCAGTGT CTGCTCCTGG 60  
 GAGGCAGCAC CAGAAAGGC ACTGAAATGT ACTAGCTGGA TGTNACCCAG TCTTAATAAN 120  
 40 CAGGTTTTCT AATCCAGAAA 140

SEQ ID NO:6476  
 SEQUENCE LENGTH:187  
 SEQUENCE TYPE:nucleic acid  
 45 TOPOLOGY:linear  
 CLONE:HUMGS07643  
 SEQUENCE DESCRIPTION:  
 GATCAACTTT GTATATTCAC GTGTATTAAA ATATTGTGCA CTAAATGTTT TGCCCTTGTT 60  
 50 TGCTATTATA TGGTCAAGGC ATTTATCAGC ACTATTGTAA TGAATCATG TAAGTGGCAT 120  
 GGGTCAGGGA AAATTATTC CTACTTNTCT GCCTAATTAA ATTNCTGTTT TCCAGTATTA 180

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CATTAAA

187

SEQ ID NO:6477

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07644

SEQUENCE DESCRIPTION:

GATCTTGAT ATTTNATTTT TAAAAACTA GAATAAACAG AGAGGCATAA NCATATCTTA 60  
 GAGTCCAAGT GGTAGTGTTC AGCATTGGAT ATAATAAATG GATGTTTTAC AAA 113

SEQ ID NO:6478

SEQUENCE LENGTH:276

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07645

SEQUENCE DESCRIPTION:

GATCTCATT TGGGCTAAAA TAAGACAATA TTCAAAGGTC AGAGATATCT AGCCAGAATC 60  
 TNATGGAGGC TGGATTTCAG ATTTTNTNAC AGAATTAGAC AGAGGAACAC AGAGGGGACA 120  
 GGCTCACTTA GGGTGGAGGT GTGGGGTAGG GAAGCAGGNC TTGATATAAN TNATTGGAAT 180  
 CATTGTCTTT TAANCCAGTG GTTTATGTCA GGGTATAGCG TTTCANGGGA TTTGAGGGTC 240  
 AGATGGGGNA ATGTAGCCTC TTATTTTGCC AGTGTN 276

SEQ ID NO:6479

SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07646

SEQUENCE DESCRIPTION:

GATCTGTCAC TGNTCCCGT CACGCCTTGA TGGGACCGTC TAGTTGCTGG AAAACAACT 60  
 CAGGGCTCCC ACTGATTCTA CATTATGGTG TGTGTACAA TTATTCATT ATATATNACA 120  
 AGGTAATANT AATAGANATA AAATCCACAG TAANTGCAAA 160

SEQ ID NO:6480

SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07647

SEQUENCE DESCRIPTION:

GATCATAAGT NTTAGGACCA AAGGTGTTTT TAATGAGATA ATCTTTTNA TTTNNTAACA 60  
 AGAAAGGAAA TATTCACCTT ACATTTTAAC ATCAACTTTT AAGTGATATT CAGANTTAAT 120  
 TGACCATGGT GATACGTTGT AAAANGTTN CATATTAN 158

SEQ ID NO:6481

SEQUENCE LENGTH:112

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SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07648  
 SEQUENCE DESCRIPTION:  
 GATCCAAAAA AAAAAAAAAAC GAANANAATT NATCCTCACA AATTGGTGTT CTAAATATCT 60  
 TAAGANCCTA ATTAATAGC TGA CTACAAA AAAAAAAAAA AAAATNCAAA AN 112

SEQ ID NO:6482  
 SEQUENCE LENGTH:105  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07649  
 SEQUENCE DESCRIPTION:  
 GATCCTGTGT GGCCGGTGTT TGCATCTTCA GTGGCCACAA GCATAATAAA GCCCCTTTGC 60  
 CTTTCTCTGT ATTATATTCA ATACAATACA TCAATAGTCT TGAAA 105

SEQ ID NO:6483  
 SEQUENCE LENGTH:252  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07650  
 SEQUENCE DESCRIPTION:  
 GATCAGATTT AAAGNCTGGA TTCTATCTAC ATAAGTCCTT TNAATTCCAC CAGGGCCAGA 60  
 GCAGCTCCAC CACTGTGCAC TTAGCCATGA TGGCAACAGA AACCAAGAGA CACAATTACG 120  
 CAGGTATTTA GAAGCAGNGG GNCAACCAGA AGGCCCTTAA CTNTCACCAG TGCATCACAT 180  
 CTGCACACTC TCTTCTCCAT TCCCTAGCAG GGGNGGCTAG CTCATTNAC NGGGTNNAGA 240  
 ANCTGAGGNC CN 252

SEQ ID NO:6484  
 SEQUENCE LENGTH:36  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07651  
 SEQUENCE DESCRIPTION:  
 GATCACGNGT AAAGAGAACT GTTTCCTGCC CTTAAA 36

SEQ ID NO:6485  
 SEQUENCE LENGTH:125  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07652  
 SEQUENCE DESCRIPTION:  
 GATCAGCTC ATCAATATTG CCGTCATCTG TTAACTCTC CCAGTATATT TCCTCAATGT 60  
 CTGTTTACTT AAAATTTTGT GGAGTGACAT AATTAATAAG NAATAAAGTC TGAATTATAC 120  
 ACAA 125

EP 0 679 716 A1

SEQ ID NO:6486

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07653

SEQUENCE DESCRIPTION:

GATCCACACT GGGGNGAAGC CTTATNAGTG TACGANATGT GGGAAAGAGCT TCAGTCAGCA 60  
TGCGGGCCTC ANCTCCCACC AGAGACTCCA CACCGGNGAG AAGCCATATA AGTGTAAAGN 120  
GTGTGGGN 128

SEQ ID NO:6487

SEQUENCE LENGTH:329

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07655

SEQUENCE DESCRIPTION:

GATCCAGAGA GCTTCCTGAA GGACCTGTTG AACTCAGTCC CCTGACCACC ACACAGCAGC 60  
TGCGGCGGCG AAGAGAAGCT GGCTTGCCTT CCACCCCTCTG TTCTCCCTCC TTGTGCATTA 120  
AGTTCCCTCC GNGGGATGCT GCATTGGTAC CCAGCCCTCC NCTATCTCAT TTTTCTTGGN 180  
GTGGCTTGGG GTTTTATAGG TTCCNGTTTT ATCTCGTGTG TGTGGTGCAC CAGCTATGAG 240  
GTTGTCTGTA ANCAAGCCA TCAAAGGGNC TNTAAATANC TAGGNGCCAT GAGTNGTCCC 300  
GGNCANCTTT CANAACTTGA GTNTGANAN 329

SEQ ID NO:6488

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07656

SEQUENCE DESCRIPTION:

GATCTGTACT GTAATTTTGT TTGTAATCCT GTATATNATG GTGTAATGCA CAATTTAGAA 60  
AACATTCATC CAGTTGCAAT AAAATAGTAT TGAAAGTGAA A 101

SEQ ID NO:6489

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07657

SEQUENCE DESCRIPTION:

GATCATGTAT ATAATTGTAA CATCACATTG ATTTTACGGA AGATGTTATA TGGNCTTTAA 60  
TGACACAATG TTTAGNGATA AAATGTACAT TATTTTGGTT CAGTTTTTTA AAAAANNTAT 120  
GCTTTAACAA AATTCTTAGG AATNCTTTTA AGCAATGCAG GTATTGCGAT ANCTGTAGNT 180  
TTTACAATAA TGTTACTCTA CAGNTGGGAN AATNN 215

SEQ ID NO:6490

SEQUENCE LENGTH:364

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07658

SEQUENCE DESCRIPTION:

GATCTCTTTG TATTCTCTTC AAGCCCAAAC CAATTCTGTN CCTTCAATCT AAATAGTGGT 60  
 AATATGAATG TTAAAGAAAT GAAATAAGAA ACATGTGCAG GCACTTTGGA AGGTGCTAAG 120  
 TGA CTGCCCT AAGGAATGAA AAGCAAGGGC CAGGTGGGAG TAGCCAGCG AAGGCACTTG 180  
 GGCTGCCAGG AACAGGNGGC GTGGGAAACT CTGGCTTAGG NAAACATGAA CACNGGGGCA 240  
 ACAGCGGCAN ACTGTTGTTC GAGTTAAATC TAANTCTCAG GCTCTTNAC GGTAAANGG 300  
 TTANGGATAC TCCATTNNGA TGAAGANAAG NGTGAGGCTG ANNGTAANGC ACATGGCAGN 360  
 TNNN 364

SEQ ID NO:6491

SEQUENCE LENGTH:85

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07659

SEQUENCE DESCRIPTION:

GATCTTTCTT CTCCTTAAG CTCTTTGTTA ACATTCTCT AGACGCAATT TATTGAAAAT 60  
 AAAGATTNC TGTTTACTCA TGA 85

SEQ ID NO:6492

SEQUENCE LENGTH:122

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07660

SEQUENCE DESCRIPTION:

GATCCTCATT TATGTTTGTA GTTGGAAAGC AAAGCTAGGT AGCCATTCT TCTGTTCTAC 60  
 CAAGTTATAA TAGCATT CAT TTCCCTTAT ATTCCCTGA AATAAAGCAC ATTCCACTTA 120  
 AA 122

SEQ ID NO:6493

SEQUENCE LENGTH:362

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07661

SEQUENCE DESCRIPTION:

GATCCTACAT TAAGGTCATT TGTNAGAATG ATGTTTGTGT TTGNTAGAG TTGGCTGACC 60  
 TCCAACNT GGGGTCAAGG AATCCTACTG CCTNAGCTTC CCAAATAGCT AGGACTATAG 120  
 GCATGCACCC GGCCATGTGT TTTATTTATA GCTCTTAAAG CCCAGATGAA GAAATCACAT 180  
 TTTTNCAT AGTGAAGAAA CATTGGCCA TTGCTTAGTC CTTNNGGGG GTGNCCTGTC 240  
 TGTTTTCATT AGATTAGNGA GACCCTGTGT GGGCCACAGT TAATATANNC CATTATCACT 300  
 TTTAAGGTAA CCTGCACATC TTAGGTTTCA TAATTNCCTT ATTGTTCTNG NCTCAAANT 360  
 GN 362

SEQ ID NO:6494

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07663

SEQUENCE DESCRIPTION:

GATCGGGGCA CTGCAGGGGC CGAGCCATT TGGGGGGCCC CCCTCCTTGC TCTGCAGGCA 60  
 CCTTAGTGGC TTTTTCCTC CTGTGTACAG GGAAGAGAGG GGTACATTTC CCTGTNCTGA 120  
 CGGAAGCCAA CTTGGCTTTC CCGGACTGCA AGCAGGGCTC TGCCCANAGG CCTCTCTCTC 180  
 CGTCGTGGGA GAGAGACGTG TACATAGTGT AGGTCAGCGT GCTTAGCCTC CTNACCTGAG 240  
 GCTCCTGTGC TACTTTGCCT TTGTCANACT TTATTTTCAT AGATTGAGAA GTTTTNTACA 300  
 GAGANTTAAA AATGNAATTA TTTNTAAA 328

SEQ ID NO:6495

SEQUENCE LENGTH:351

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07664

SEQUENCE DESCRIPTION:

GATCCTGTTT CTACCAACAC TGCACCTTAT CCCAGGAACC TGCCCTAGAC CTCCAGAGAC 60  
 CATATTNNNT CTCCTCCAT TTCTACCCAG ACCTCCAGGC CTCCTTCTGG AATNATAGAA 120  
 CCGTAGAATT GGAAGGAATT TNAGAGGGGN TCTAGTTGGA GTTGTGTCCA ACAGAATTCA 180  
 TTAACACCAG CCTGGGCTTG TTTTTCCTCC TCCCTCTGGA CTTTTTAAAT CTTTTCCTCC 240  
 ACCTCAAAAA ATACTTACAC ACAGATTCTT CTTGTACAGG CATCAAAACC AACTNCTNTG 300  
 CCCCTAAGGC TGTGTNNGNG TGGTNTCCAG NNANCCNTAC CNCAGTCANT N 351

SEQ ID NO:6496

SEQUENCE LENGTH:122

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07665

SEQUENCE DESCRIPTION:

GATCTGGTAG GGGAGAAATG GCGAATGTAA TACACATGAN ATGGTATATC CTTGCAATGT 60  
 ACAGTATCAG AAGGTGGTTT GACAGCATCA TAAACAGGCT GACTGGCAGG AATGAAAACA 120  
 AA 122

SEQ ID NO:6497

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07666

SEQUENCE DESCRIPTION:

GATCANTTGC AAACCTCCCC CAGCCCTAC CATCCAATNT GGACGGAAAA CANGAACTGC 60  
 CTGAAGAAGA GTCCAAGCTA CAGATACACA GCGTGTGCAT TGCGGCTGTC ACCTTCCTNC 120



TNCCACTTCT GTATCCTCAG AGATGCTGCG TGGATGTTTC CTTANCCCTCA GCTGACTTCC 180  
CTGTGAATNT CTAATGCTAG TTCANGGGCC TNCNGGAAAT TGANTTN 227

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SEQ ID NO:6498  
SEQUENCE LENGTH:238  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS07667

SEQUENCE DESCRIPTION:

15

GATCTTGCCC TTCTCACTCC AGAGGCTAGT GGTACACAGAC AGCTGGGAAT GGCAGCCACA 60  
GAGGGTCCCC TCTGGGAGAA ACAGCTTCAC CCCAGCCTCA GGGCCCTGGG CCATCACTGC 120  
AGTGGCCCTG GGAGGTGAGG AAGAAGCTGG CTAGAGGAGG GGGCTCCAC CTACCTTTTA 180  
TTTAAGCCAG TATTCTTGT TCCTGCTTGT AATAAACTT CAGTTTATAA GAGTTAAA 238

SEQ ID NO:6499  
SEQUENCE LENGTH:142  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

20

CLONE:HUMGS07668

SEQUENCE DESCRIPTION:

25

GATCTGTCAT AACTCATTTT AAAGTGTGAA ATATGCCATA TGAAGAGGGN TTAAGAGGCT 60  
GNGAAATCA TATTCAACC AAATCCAGCA TTAGTTTTTC TTAGGTCTAA TANTTCCTNG 120  
TTAATAAAGA TTTAAATGCA AA 142

SEQ ID NO:6500  
SEQUENCE LENGTH:160  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

30

CLONE:HUMGS07669

SEQUENCE DESCRIPTION:

35

GATCTGTCAT TGTCTCCCAT CACCCCCAAA TGGGCCCTC TCGTTGCAGG AAAACAAGCT 60  
CAGGGCTCCC ACAGTTTCTA CATTATGGTG AGTTGTATAA TTNTTTCATT ATATATTACA 120  
ATGTAATAAT AATAGAAATA ANGACACAA TNNNTGTAAA 160

SEQ ID NO:6501  
SEQUENCE LENGTH:266  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

40

CLONE:HUMGS07670

SEQUENCE DESCRIPTION:

45

GATCTGCCCC AGACTCCCAG AGGGTAATGC CACTCCCACA ATCTCAGGCC TGGTACCCAT 60  
CCTNTTCCA CTGTGAGCAG AGCCAGAAGG TAGGTCTNTT CAGAGTCTGT NCCCTGGAC 120  
CTGGGGNGTG GATATGANAT GGGATATCTC CTTCCATTCC CCGNTCCAGG GGAGAGTCAC 180  
TAGTTGTACC CTAATCCATT AGGTCCCAA TAGGGGCCCA ATTCACCTG TATNAGGNTC 240  
TGTGCATNCC AGCTGCCNNA AATNTN 266

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SEQ ID NO:6502  
 SEQUENCE LENGTH:119  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07671  
 SEQUENCE DESCRIPTION:  
 GATCCAGACT TAGGGACGAG GCTGTCAGTG GTGGGCACCC TCTGTTCTG TTTGTGTGTT 60  
 TGAATAGTCT GAAATNCTGT GACTTTTTTT GTGTGAATAA AGNTATGAAA CTTCTGAAA 119

SEQ ID NO:6503  
 SEQUENCE LENGTH:90  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07672  
 SEQUENCE DESCRIPTION:  
 GATCTTCGTG TGAGCCGCGN CGTCCGNCN GACCGAGCTG CCTTCGCGTG CCCCCGNCCT 60  
 GTGTTTTATA AAAAGAAAGA TTCTCGGAAA 90

SEQ ID NO:6504  
 SEQUENCE LENGTH:62  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07673  
 SEQUENCE DESCRIPTION:  
 GATCTGTGAG TGTATCAAAA CAACATAAAT AAAGTTGAAC AACTGATACG CAAAAAACA 60  
 AA 62

SEQ ID NO:6505  
 SEQUENCE LENGTH:72  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07674  
 SEQUENCE DESCRIPTION:  
 GATCAAGTTT GGTCAGGTTT TGTCACCAAG CTTTGTAAT AAAGTGGTTT TCATAGCTTT 60  
 TTGGAGATGA AA 72

SEQ ID NO:6506  
 SEQUENCE LENGTH:221  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07675  
 SEQUENCE DESCRIPTION:  
 GATCTTTTTT CAGAATGTTG GAAAATCCTG TAAATGCAAA TAGTCAATAC TGTATTAAAT 60  
 ACGTGCACCTT GNGTNTGCT TCGCTGTAC AGTTGTAAAT AATCAGAACA TATGNAAAAG 120

EP 0 679 716 A1

GTACCCTACA GAGGAAATTC TGATACAGAT TATTGCTATA TTATAACCTN TTGCTGTTGA 180  
GCGGGCTGTA GGTAANCTAA TGTGTGGTT TGAATATTAA A 221

5 SEQ ID NO:6507  
SEQUENCE LENGTH:42  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07676  
10 SEQUENCE DESCRIPTION:  
GATCTTCATT TTTGTAATAA AACGGNAGAC TCATCCAGTA AA 42

15 SEQ ID NO:6508  
SEQUENCE LENGTH:62  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07677  
SEQUENCE DESCRIPTION:  
20 GATCTTAGAC TTCCATCCT CTAGAACTGT GAGAAATAA TTCCTGTTGT TTATGAGCCA 60  
AA 62

25 SEQ ID NO:6509  
SEQUENCE LENGTH:117  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07678  
SEQUENCE DESCRIPTION:  
30 GATCTGCCAT CTAGAACTCA TATTCTAAAG GGCAGTGNTT TCTCAGAACA GTGATGTTCT 60  
GGAATATGTA TTATTTATTT TAACACTTTT TTAATAAANT CTTTATTATA AACCAAA 117

35 SEQ ID NO:6510  
SEQUENCE LENGTH:113  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07679  
SEQUENCE DESCRIPTION:  
40 GATCTGTTTA AAAGATTAAA TCTCAAGTTA ATTAAAAATA AGCTTTTCAA AAATGTATTA 60  
TATTTATAAC AAATATACTG TAAATAGANT AAAGACATGC TATTCAGTGT AAA 113

45 SEQ ID NO:6511  
SEQUENCE LENGTH:159  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07680  
SEQUENCE DESCRIPTION:  
50 GATCTGTCAC TGTCTCCCAT CACCCTAAGA TGGGNCCTGTC TAGTTGCAGG GAAAGAAGCT 60

55

CAGGGCTCCC ACTGATTCTA CATTATGGTG ANTNGTAGNA TTATTTTATT ATATATTACA 120  
 ATGTCAATAA TAGAAATAAN GTGTGCANTA AATGTCAAA 159

5 SEQ ID NO:6512  
 SEQUENCE LENGTH:219  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07681

10 SEQUENCE DESCRIPTION:  
 GATCAGCCGG AAGAGAAAAT NAAGACCCCA GAGACATTTA TTGGGGAGTA GGATGTGGCT 60  
 GAGTGTCTTT TTTTGGCCA GACTAGCGGA TTCAGTCCTG GAAGAGAGTA TCATATAATG 120  
 AGNCCACAG GCACTGGCAC CCTTGGGTTG GNAATAGANG NNGNCCATGG ANTGGCGAAA 180  
 15 ACCAGGGATT CCAGCTGGGG NATAGTANCT TGAAGGTGN 219

SEQ ID NO:6513  
 SEQUENCE LENGTH:217  
 SEQUENCE TYPE:nucleic acid  
 20 TOPOLOGY:linear  
 CLONE:HUMGS07682

SEQUENCE DESCRIPTION:  
 GATCTTGACC TACAGTTTGA AAAACAGAGT ACTGAAGAGT CTTGTTTCCT TTATTTAGAA 60  
 25 CAGTGCAAGG ATGAGTATCT GGGTAGAGTT GTGCGTTGTA CATAACCTTT GATAGTCATA 120  
 TAGTTGAACC AAAAGCAANN TCTGTAGTGN CATTGAAAAA ACATTTTGAC TTGATTATC 180  
 CTGNCAGNNT NCNNTAATTT TTGGCTGGCT AATNCAN 217

30 SEQ ID NO:6514  
 SEQUENCE LENGTH:119  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07683

35 SEQUENCE DESCRIPTION:  
 GATCTCTGCT CACGTTGCCT CCCTTCATCT TCCTGCATAA GTGGAAGCAG CCTGAAGCCC 60  
 TCACTGTTTC TTGTACAGCC TGCAGAGCCG TGAGCCAAAT AAAGCTCTTT TCTTTTAAA 119

40 SEQ ID NO:6515  
 SEQUENCE LENGTH:173  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07684

45 SEQUENCE DESCRIPTION:  
 GATCTGATGG TTTTATAAGC ATCTGGCATT TCCCCTGCTT GCACTCACTC TGTCCTGGTG 60  
 CGCTGTGAAG AAGGTGCTG CTTCTCCTTT GCCTTCCACC ATGATTGTAA GTTTCCTGAG 120  
 GCCTCCCTGG CAATGCAGAA CTGTGAGTCA ATTAACTTC TTTCTTTAT AAA 173

50 SEQ ID NO:6516

55

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07686

SEQUENCE DESCRIPTION:

GATCACCATG TNAGCCTTAG ACCAAGAAGC TGGCTAGTCC TTNCTGTGAA GCTAATACAA 60  
 TNGNCATTTT CAGACAAATT TAAAGGNAAC ACTAAGGCTG CTTCAAAGAT TATCTGATTC 120  
 CTTTAAAATA TATGTCTATA TACACAGGCA TGCTCTTTT TTAAGTGCTT ACATTTTAAT 180  
 AGAGATGANT CAGTTTNGA ATCTANGCTG TTTGCCCAAG NTGANGCTNC CAGGGTTN 238

SEQ ID NO:6517

SEQUENCE LENGTH:289

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07687

SEQUENCE DESCRIPTION:

GATCTGTTTT TNACCACTTC ACTGAAAGAC ACCATTTATC TACCCAAGGG CAGAAAGTAG 60  
 AACTTACTAT TCATTAAATG TTTGACACAA TTGGAATTGT CTTTAATTTT TGTCAGAATG 120  
 CTATTGAAAA TGTGAATTGC ATGACTTGGT AGCATATTCT TTTCTGCAA AAATAGGCCA 180  
 TATTAACCAT GCTTATGACC ANTGNCCTGT GCTACTGGCT TTTGNAAAA ATGGTTTGCN 240  
 TCAGNTTGGG GAAGTAATNA AAGGANTNCA CCTGGNGNCC CNNGAATAN 289

SEQ ID NO:6518

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07688

SEQUENCE DESCRIPTION:

GATCCCCCAG GATTCTATTN TGTTTAATGG GCTTTTCTAC TAAAAGCATA AAATACTGAG 60  
 GCTGATTTAG TCAGGGCAAA ACCATNNACT TTACATATTC GTTTTCAATA CTGCTGTTC 120  
 ATGTTACACA AGCTTCTTAC GGTTTTCTTG TAACAATAAA TTTTTGNGT AAATANTGGG 180  
 TACATTNTAA CAAACTCNGT AGTNCAACCT AACTNGTAT NAACGGTGTG TAAAAAN 236

SEQ ID NO:6519

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07689

SEQUENCE DESCRIPTION:

GATCAGGTCT GCTTTNAGTT TCATTTTTGT TTCTTTCCCG TCCCACTCTT TAAAACTGG 60  
 TTCCGTGAGA AANGGCAGAA GCCGTTCGT GTCTCTTGCA GGCTGGGCCG NCTTCATGNA 120  
 GTNCGAGGGC GTNCCGTGAC NACGTACATA CGTATGN 157

SEQ ID NO:6520

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07690

SEQUENCE DESCRIPTION:

GATCTTTCTG GATATAATGA AGCTTCCTGG AGAAACAGAC TGGCAATCAG AAAGATTGG 60  
CTGCTTCCGA CACCTCCATC TTGGGCCTGC AGAGGCTGCA GCAATCTGTG AGGCAGCCGA 120  
ATCTGCGNGG CAGNCCACTC TTCTAGGACA TATGGGTTTC ANNAGGCACC NTTTTGCTAN 180  
GNAGGCATAN TTANN 195

SEQ ID NO:6521

SEQUENCE LENGTH:337

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07691

SEQUENCE DESCRIPTION:

GATCGAAACC AAGTTATTAT TATCCTTACT GTATTCCATT GCTTGATCA AAATCTACTT 60  
TTTTNCTAGT AGGAAACTAT GCATTCCCTA TCAGTCCCTT TGATTATCAG GAATGTATAA 120  
GAATTGTGAT AAAATAGGCC AATATGCTAT TTGGTACCAT TTGTATGTAT TTTANGTGCA 180  
TAACCTAGGT AAAATAAGNN TAGTTTCTAT GTGTAAAGAA GCAAGTTTCA CAGTATGCAG 240  
ACTCCAGTGG ATGTATTTTA GGCTGTATAC ATNTTTAAGC TCTNTNTGGT ANATAGGGTA 300  
TACAAACTAN NTGCCTCNNA ATNCAATAN NTTCCGN 337

SEQ ID NO:6522

SEQUENCE LENGTH:331

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07692

SEQUENCE DESCRIPTION:

GATCATTTC A TGGAACTTT GAAGTATCTT TGA CTCTAAC TTTGACTTGG TGGTGGACCT 60  
TCCTTGTTTT TANTAACACC TAAGAGATAT CCTTTAGAAT TACATGTATT TTAGCATAAG 120  
GAAATTGNAA AAGTAAACA TACTGGTTTT TTTCAACAAG ACCATATGTA AATTAAATAG 180  
TGAAATGTGT ATGNGTTTCA GTAGAACTGT ACCATCAACA ATGTTTCCAT AAATATGCAG 240  
NGTTCCTNCT NNTGTATTGT TATTTACAAT ATTGTAAAT NGGATGCATT TGCAATNNCT 300  
CGGNTTCTAA AGNATTGNGG TNCNGANCGT N 331

SEQ ID NO:6523

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07693

SEQUENCE DESCRIPTION:

GATCTGGAAT GGTGTTTTGG TTTGGGGGGA ATTTTTTTTT TTCCCGGCA AATNACATGT 60  
GTTGTTGATG TGAGTATCTG ATGAAAAANC AATGNCAGAA TANCCGN 107

SEQ ID NO:6524

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07694

SEQUENCE DESCRIPTION:

GATCTATATA TGTATAAATA TGTATTTTGT CAAATTTGTN ACTTAAATAT ATAGAGACCA 60  
GTTTNCCTCTG GAAGTTTGT TAAATGACAG ANCGTATAT GANTTCAAGA AAATTTAAGC 120  
TGCAAAANTG TATTTCTAT AAANTGAGNA GTCTCACTGN TAGCGGTTCT TTATTGCTCA 180  
TTTTTAAAA ANTGGN 196

SEQ ID NO:6525

SEQUENCE LENGTH:257

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07695

SEQUENCE DESCRIPTION:

GATCGGCTCT AGAAACACTG CTTTCCTTC TTNCITTTTG TTTTCTTTCT NTTATTATTT 60  
TTTTAAAGAG TAAACGAAAG TNCTGTATGA ATTCGGACCC AGGCAGCAAC CACAGGNCN 120  
GGGGTGAGAC CCTCCTCCTC CCAAGNGAGC AAAAAGGACC CATGGCCCCC AAAAAAACC 180  
CTCAACGAGA ATCCTCAGCN TTGTAAATG CAAAANTGTC TAATGAATAT TTNTATNTGT 240  
NCCATTTTGT ATAANTN 257

SEQ ID NO:6526

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07696

SEQUENCE DESCRIPTION:

GATCCTATTT AACATGACAA GTAAATGCT TGCCATAGGA TATTTATATC TAGAACTTTG 60  
ACAGACATAC CTAATCATTG TCACTCAGGC ATCCTGCATA TCATTCATTT ATTCATTTGC 120  
CTATCATTTG TTGANCATTT AAAATGTCCT AGATACTTAG NATATGANTG TTGAATGTCA 180  
CAAACTGAA TGTCACACTC CCTCCCTTT AGANATTTNC AGCATGGGAT GCGAGCTAAT 240  
GATATGTAAA TAANTACATA TTTNTAANTA ACACAACCNN AAAANAANAN AAACNAN 297

SEQ ID NO:6527

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07697

SEQUENCE DESCRIPTION:

GATCGTGGCC AACGTGGACC TGCCTACGNA GGGTGGGCTC TGACCCAAGT GGGGCCTCCT 60  
TGTCCAGGTC TCACTGCTTT NCACCGTGGT CAGNGGGACT NTCAGCTGAG CTTNAGCTCC 120  
CATGGAGCCA GCAGGNN 137

SEQ ID NO:6528

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07698

SEQUENCE DESCRIPTION:

GATCAGCCTG AGAAGCCACT CAACTTGGCT CACATCGTGC CTCCAGACC TGTAACCAGC 60  
 ATGAACGACA CCCNTGTTCT CCCACTCTGT TCCCTCCTCA GGAAGTCCTT TTATTACCAG 120  
 GAGCTCGGAC GGTGCTTTTG GTGGNTGCGT CTAGATGGAT AACATGACTT CTTCTACCCT 180  
 AAAATATTCC TATAACTT TNAGCTGTTT TGGTTCCTCC AGGGTGNATG GTACCNATTA 240  
 ACCCAAAATA CTGNTTATNT ACCCNTNTT ACNATNTANN AGTCANTTTT GGN 293

SEQ ID NO:6529

SEQUENCE LENGTH:345

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07699

SEQUENCE DESCRIPTION:

GATCCACGGG GCCAGGCCAC CCTGCGGGAG CGCCACACGC ATCCACTTCG GATTCAGTGG 60  
 GTGAAGACAG AACGCTNAGA GTCTGCAGGC GGCTCCTGTG CTTTAAATTT CTGGCTCTTC 120  
 GGATGTCTTC TAGACATTTA CTATCACTGC ACCTGAAGAA AAAATCACTT TTACCTTCCT 180  
 AATTAAAAA GACAAAACAG AAATGTACGT TCCTTCGCTA GCTTTAGTCT TTCTGTTCCC 240  
 ATTTNATAA ANTCTGAGGC ATTGATAATG NTCNNATCTA AAATTTGTAC AGTGTGATTT 300  
 CNNTNNTAAG NGTTAAANCT TTTANTAAAA GGGGCANGAN NTNAN 345

SEQ ID NO:6530

SEQUENCE LENGTH:266

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07700

SEQUENCE DESCRIPTION:

GATCCAGAAA ATAGGTACGG TTTTAAAAA TTTNATATAG AAAAGCTACA AAGTAAATTG 60  
 AGCAATGCTT TTAAAGTTAT CTTTGTTTTA TAGACTTTTT TGTTGTATGT ATTACAGTCT 120  
 TTATAATCTT ATTTAATGNA TATNTGTACT TTCAAGTACT GATGGAGATA GNCTCAAAAC 180  
 AGTTATTTTN TTACAATTAA TCTACAANGG GCATTANTAT TGTNGNCTTT TAAAACATCT 240  
 GCTGGNTATC TNATNTGCAA TTCNTN 266

SEQ ID NO:6531

SEQUENCE LENGTH:43

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07701

SEQUENCE DESCRIPTION:

GATCCACAC ACTAAATATA TGGTTGTTTT GCCACCTTTT AAA 43

SEQ ID NO:6532



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SEQUENCE LENGTH:285  
SEQUENCE TYPE:nucleic acid  
5 TOPOLOGY:linear  
CLONE:HUMGS07702  
SEQUENCE DESCRIPTION:  
GATCTGTTTT TCACCACTTC ACTGAAAGAC ACCATTATC TACCCAAGGG CAGAAAGTAG 60  
AACTTACTAT TCATTAAATG TTGACACAA TTGGAATTGT CTTTAATTTT TGTCAGAATG 120  
10 CTATTGAAAA TGTGAATTGC ATGACTTGTA GCATATTCTT TTCTGCAAAA TAGCCATATT 180  
ANCATGCTTA TGACAATGAC TGTGCTACTG TCTNTGGAAA ANTGTTTGTG TCAGTTGGNA 240  
ATNCTAANNG NTTCACCTGC GGANNAACG CCCCNNNCCN CCCAN 285

SEQ ID NO:6533  
15 SEQUENCE LENGTH:43  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07703  
20 SEQUENCE DESCRIPTION:  
GATCCTCTTG TGTATATGCA AATAAACCTA TTATTCATT AAA 43

SEQ ID NO:6534  
25 SEQUENCE LENGTH:194  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07704  
SEQUENCE DESCRIPTION:  
30 GATCAAGACA CCTTTTATTA ATAAAGAAGN GACACAGGTG TAGATATGTA TATACAAAA 60  
GATGTACGGT CTGGCCAAAC CACCTTCCCA GCCTTTATGC AAAAAAAGGG GAGANTCAAA 120  
GCTTTCATTT CAGAAGTGT GCGTGGANAA GTATCTGTAA TTAAAGTTTC GANGTAATTT 180  
AACCTATTTT TAAA 194

35 SEQ ID NO:6535  
SEQUENCE LENGTH:45  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
40 CLONE:HUMGS07705  
SEQUENCE DESCRIPTION:  
GATCAAGCCC TGCTTAAAGT TAAATAAAAT AGAATGNATG ATAAA 45

45 SEQ ID NO:6536  
SEQUENCE LENGTH:38  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07708  
50 SEQUENCE DESCRIPTION:  
GATCTTCTGG ATGACCTGAA ATNAGAACTA ATTGAAA 38

55

SEQ ID NO:6537  
SEQUENCE LENGTH:52  
SEQUENCE TYPE:nucleic acid  
5 TOPOLOGY:linear  
CLONE:HUMGS07709  
SEQUENCE DESCRIPTION:  
GATCGCCCAA CTGCACTCCA GCCTGGNAGC AAGACTCTGT CTCGAAAAGA AA 52

10 SEQ ID NO:6538  
SEQUENCE LENGTH:55  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
15 CLONE:HUMGS07710  
SEQUENCE DESCRIPTION:  
GATCAGNACC ACTGCACTCC AGCCTGGGCA ATCANAGTAC GACTCCTGGC TCAAA 55

20 SEQ ID NO:6539  
SEQUENCE LENGTH:252  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07711  
25 SEQUENCE DESCRIPTION:  
GATCAGTCTG AAGTCGATTA CTAACAGCTG AAGCTGATAA AACCATTAAA GTATACAGAG 60  
AGGATGACAC AGCCACAGAA GAAACTCATC CAGTCAGCTG GAAACCAGAA ATTATCAAGA 120  
GAAAGAGATT TTAATGAATG TGGAATTTTT TCTCTCTCTT TTTTTTCTT TTTAATTAAA 180  
AAAAAAAAGG CTTGGGGTTC ATGGGGTTTT CCNGTCATTT NGTGCNCTGG CTGGGATTTT 240  
30 AAGGGGGAAT TN 252

35 SEQ ID NO:6540  
SEQUENCE LENGTH:48  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07712  
SEQUENCE DESCRIPTION:  
GATCGAGNCA CTACACTCCA GNCCGCCGAA GCAAGACTCT GTCTCAAA 48

40 SEQ ID NO:6541  
SEQUENCE LENGTH:235  
SEQUENCE TYPE:nucleic acid  
45 TOPOLOGY:linear  
CLONE:HUMGS07713  
SEQUENCE DESCRIPTION:  
GATCANACAT TTNCTACCTA TGAATNTTGC TGCATACAGA AAGTGCCCTT TCCTCAGGAA 60  
GTTGCTGTGT NTCATTTCTT TAGATGGNCT CTTATCTAGA ATACATAGCA GCTCTGCAAA 120

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GAANCAGTTT TAAAAATGG GAACTTCTAC ATTGAAAAGT CCCCNTTTTT GTGCCAACTA 180  
TGATTAGTGN GCGGAAGNAN TCTTATTCTA TGGCATATGT ATGGANGGGG GGGGN 235

5 SEQ ID NO:6542  
SEQUENCE LENGTH:36  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS07714  
SEQUENCE DESCRIPTION:  
GATCCTTTTA AATTAAAGC AAGTCCTAAA ATGAAA 36

15 SEQ ID NO:6543  
SEQUENCE LENGTH:155  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07715  
SEQUENCE DESCRIPTION:  
20 GATCCAGCGN GCGCAGCGAG AGTACCTGCA CAAGGCCGTC TTCAGGGGCC TNCTCACGGA 60  
GAAGNCGGCG CCCGTNATGA ACGTCATCCA CAGCATCTTC AGCCTCGTGC TCAAGTCCG 120  
CAGCCAGCTN ATCTCCAGG CCTGGGGGCC CCNNN 155

25 SEQ ID NO:6544  
SEQUENCE LENGTH:110  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07716  
30 SEQUENCE DESCRIPTION:  
GATCAAATAT CACTCTCCTA CTTACAGGAC TCAACATACT AGTCACAGCC CCTATAACTC 60  
CCNCTTACAA TANNTANCCA CAACCAAAAT GGGGCTCANT CACCCAACCN 110

35 SEQ ID NO:6545  
SEQUENCE LENGTH:192  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07717  
40 SEQUENCE DESCRIPTION:  
GATCTGGTTG TNTAGAAGCA TGCAGCACCT CCTGCTTCAC TCTCTCTGTC TCTCCTGCTC 60  
CACCATGGCC AGAAACGTGC CTGCTTCCCC TTCGCCCTCT GCCGTGATTG TAAGTTTCTT 120  
GAGGGCTCCC CAGCCATGCT TCCTGTACAG CCTGCAAAAC TGTGAGTCAA TTAAACCTCT 180  
45 TTTNTTCATA AA 192

50 SEQ ID NO:6546  
SEQUENCE LENGTH:73  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

55

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CLONE:HUMGS07718

SEQUENCE DESCRIPTION:

GATCATACTG GTTTGTTTCT TATTTTGATT GGAGAAAAAT NAAATTGCTG CATTTCGCAG 60  
TGACCCATTT AAA 73

SEQ ID NO:6547

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07719

SEQUENCE DESCRIPTION:

GATCAAAATGT GTGGCCTTTG ACTGAAATCA GCCAGCCCAT GGCCCCCAAT AAAGGCAGCT 60  
GCCTACTNCT CCNTCTGAAA 80

SEQ ID NO:6548

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07720

SEQUENCE DESCRIPTION:

GATCCANATG CGTGTGGCAG CCNAAGGATT TGTGTAGGA GCAATGNCTG TTGGTATGGG 60  
CTATTCCATG TATCGGGAAT TCTGGGNAAA ANCTAAGCCT TAGAAGAAGA GATGN 115

SEQ ID NO:6549

SEQUENCE LENGTH:98

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07721

SEQUENCE DESCRIPTION:

GATCATAGCA TATCTACTAT TTTATTATTT GATTTTAAA ATTAAACATT ATATTATGGG 60  
TAACCTTACA TGTCAATAAA CAATTCCACA TTGTCAA 98

SEQ ID NO:6550

SEQUENCE LENGTH:33

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07722

SEQUENCE DESCRIPTION:

GATCAACTTT GGAATAAAGT GATGCCCTTC AAA 33

SEQ ID NO:6551

SEQUENCE LENGTH:42

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07723

## SEQUENCE DESCRIPTION:

GATCCACTGT AATATTTAAT AAAAAATGTT ACTATCTGTA AA 42

5

SEQ ID NO:6552

SEQUENCE LENGTH:24

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS07724

SEQUENCE DESCRIPTION:

GATCAAAATAT CACTCTCCTA CAAA 24

15

SEQ ID NO:6553

SEQUENCE LENGTH:141

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07725

20

SEQUENCE DESCRIPTION:

GATCAGGACC CTNTCAGTG CACCCANTTA GNGTTGTGAG CCCTTAAAAG GACCAGGGAT 60

TGCTCACTCG GGGAGCTCG CTCTTGAGAC AGGAATCTTG CCCATTCCCC GAACGAATAA 120

ACCCCTTCCT TAACTCAGAA A 141

25

SEQ ID NO:6554

SEQUENCE LENGTH:226

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS07726

SEQUENCE DESCRIPTION:

GATCAGGCAG CAGGAGTGAG GGGCACAGTC ACCCCAGGCC TTGCTGAGCC CAGGTCTGGG 60

TACTGAGTGT CCAGAGCTGC CTCCTCAGGA GGTTAAGGTG GGGGCAAAGG GGAAGCTTCA 120

AGCACTTTGC CTACTTTTGT TCACTNCCCA GTGCACTGTG ACTCAGGCCT TCCCATCAGG 180

35

CCTATTTGTC TACCCAATAA AGCGTGTTTT TTCCAGAAAC AAGAAA 226

40

SEQ ID NO:6555

SEQUENCE LENGTH:46

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07727

SEQUENCE DESCRIPTION:

GATCAGCCTG GCCATGGTNA AACCCCATAT CTAGTAAAAC TACAAA 46

45

SEQ ID NO:6556

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50

CLONE:HUMGS07729

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SEQUENCE DESCRIPTION:

5 GATCCACTAT NAGGGTGGCA TCAGCCTGAA TTGAACATCC TATATCTNAA CATCTGCATA 60  
AATTCCAGGT GACCACCAGT GTGCACCACT CACCCATCCC AGTGTATTCA GGCCNNNTGA 120  
CCTGACCCAN TTTGGCCCAG AGGACTCTGC TGGTGACCTG AAAAGAGGGA CTACATATTT 180  
NAGGATATTG TTGGTCTCAC ATGACTCTTG ATAGAGTTTG CCAGCCTTCA AATCACCAAC 240  
TGTGGGAACC AAGNNGGNNN TTATTGCCTT GCTGTGTTCA ATTACANAAA ACGNTGGAAA 300  
NGGCTN 306

10 SEQ ID NO:6557  
SEQUENCE LENGTH:255  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
15 CLONE:HUMGS07731

SEQUENCE DESCRIPTION:  
GATCTGAATA CCCCTTCTCT GTAGCTGCTA GTGAGCCTTC CCATTAGAT TAAAGATTGC 60  
TTTATCCAGC AGTCAATTAA CTCTCCAGTT ATCAGTACTC CCACAATTGG CCAGGGCAAC 120  
AATAATTGGA GTTCATACTG ATGCCCTGAG GCACTGAAAA AAAAAAAAT TCCCAAGGNG 180  
20 CCTTNTGGGN TGNCTAAAGG TTNCATTGTG NTTGGNGGCT TTNGTGTTAG GTGTGCNGTT 240  
TANTTTCTTA NTNN 255

25 SEQ ID NO:6558  
SEQUENCE LENGTH:59  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07734

30 SEQUENCE DESCRIPTION:  
GATCACGNCA CTGCACTCTA GCCTGGGCGA CAGAGAGAGA GACTGTCTAA AAAAGGAAA 59

35 SEQ ID NO:6559  
SEQUENCE LENGTH:69  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07735  
SEQUENCE DESCRIPTION:  
GATCCTNAGG TCTCCTAGCC ATGTGGAGCT GTAAGTCCAA TNAACTTCT TTTTCTTCCC 60  
40 AGTCTCAAA 69

45 SEQ ID NO:6560  
SEQUENCE LENGTH:53  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07736  
SEQUENCE DESCRIPTION:  
GATCTGTCAA GTCCAGTAGA GCTTCAAGGT AAAATNAAAA TAACAATGTG AAA 53  
50

55

5 SEQ ID NO:6561  
 SEQUENCE LENGTH:33  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07738  
 SEQUENCE DESCRIPTION:  
 GATCCAGAGG CCATGGAAGA GTCTCCAAGG AAA 33

10 SEQ ID NO:6562  
 SEQUENCE LENGTH:158  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS07739  
 SEQUENCE DESCRIPTION:  
 GATCAGCTCA AAAAGNTTGG GCTTAGNGTT TTCATTGCAA ATNATAATTG CTGTAGAGCC 60  
 ACACACAACT TTTGAACTTT TAATTATAAG TGGTATGGCT AAAGTTATTN NCTGAAAATT 120  
 TCAGTAAAGT GTGTGAATGT TTCTTTATGT ATTANCNN 158

20 SEQ ID NO:6563  
 SEQUENCE LENGTH:121  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS07740  
 SEQUENCE DESCRIPTION:  
 GATCAGGGTT CTTTTTTTCC CCCATACAAG TATCCAGTCA TTGTAACACT GTTTATTGAA 60  
 AGAATTATCC TTTCTCATT AAATTACCTT GCCAATTAGT AAAAAATCAA TTAACCATAA 120  
 30 A 121

35 SEQ ID NO:6564  
 SEQUENCE LENGTH:87  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07741  
 SEQUENCE DESCRIPTION:  
 GATCAGCATA CACAAATNAC AAAAGTCTGA ATTTTTTTTT ATCAAGAGGG ATAAAACACC 60  
 40 ATGAAAATAA ACTTGAATAA ACTGAAA 87

45 SEQ ID NO:6565  
 SEQUENCE LENGTH:54  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07742  
 SEQUENCE DESCRIPTION:  
 50 GATCCNTTTT NCTGTGGCAT TTGGTGCCCT AAAAATTTTG CATTTATCTT GAAA 54

55

5 SEQ ID NO:6566  
 SEQUENCE LENGTH:20  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07743  
 SEQUENCE DESCRIPTION:  
 GATCATTGA CAACTGCAAA 20

10 SEQ ID NO:6567  
 SEQUENCE LENGTH:143  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS07744  
 SEQUENCE DESCRIPTION:  
 GATCGACTAT GAGACAGCAA AGGGGCCTAC CTNCTNATGG AGTTAGCCAA GAGCCAGGAC 60  
 AAGAGTCTCA AGATTTATGA CGGTGCCTAC CATGTTCTCC ACAAGNAGCT TCCTGACGTC 120  
 ACCANCTCCG TTTCCNTGA ANN 143

20 SEQ ID NO:6568  
 SEQUENCE LENGTH:199  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS07745  
 SEQUENCE DESCRIPTION:  
 GATCTGCTGC AATGCTCNAAGGCCAAGGAT TCATCTNTCT TNTCACCCTA GGACCTGNCT 60  
 GGCATTGTAT TAGCAAACTC TTCTACTAGA CATCGTACTA CACGACACGT ACTACGTNGT 120  
 30 AGCTCACTGC CNCTGATGTC CTATCAATAG GAGCTGTATT TNCCATCATA GGAGGCTTCA 180  
 TTCACTGGTN TCCCNATN 199

35 SEQ ID NO:6569  
 SEQUENCE LENGTH:37  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07746  
 SEQUENCE DESCRIPTION:  
 40 GATCGTTTCC AGGACAATAA AAGTTTCGGA GTTGAAA 37

45 SEQ ID NO:6570  
 SEQUENCE LENGTH:57  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07748  
 SEQUENCE DESCRIPTION:  
 50 GATCAGATGT TAAAAATNAT TCCAAATACT TCATTAAAAA AATTATTTTA TTATAAA 57

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SEQ ID NO:6571  
 SEQUENCE LENGTH:152  
 SEQUENCE TYPE:nucleic acid  
 5 TOPOLOGY:linear  
 CLONE:HUMGS07749  
 SEQUENCE DESCRIPTION:  
 GATCGAGGAA AGGGGCGGAG AATTTTTTTT TCTTCTTCCC ATTCTTTAA AAAACCAACA 60  
 10 CAAGAAAACA CACACACACA CAACCAACGT TTGTTCCCGA GTAGAAACAT AAATAGGGCA 120  
 GAATCGAACA CTCTGTTCTT CTCTCTTCCA AA 152

SEQ ID NO:6572  
 SEQUENCE LENGTH:22  
 15 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07750  
 SEQUENCE DESCRIPTION:  
 20 GATCAGAGCT TGAAAAACA AA 22

SEQ ID NO:6573  
 SEQUENCE LENGTH:111  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS07751  
 SEQUENCE DESCRIPTION:  
 GATCAACCTG TGGCTGTTT CCCGTCTAGG TTCTCACAGG NATCTCCTGA CAGAGGTACT 60  
 30 TAACAATGGC TCTNCTGGAA ATTTCTATAA ATAAATGTC CAAAATGGAA A 111

SEQ ID NO:6574  
 SEQUENCE LENGTH:44  
 SEQUENCE TYPE:nucleic acid  
 35 TOPOLOGY:linear  
 CLONE:HUMGS07752  
 SEQUENCE DESCRIPTION:  
 GATCTCATCA CTGCTCCTTA TAATAAACCT AATAAGCAA GAAA 44

SEQ ID NO:6575  
 SEQUENCE LENGTH:42  
 SEQUENCE TYPE:nucleic acid  
 40 TOPOLOGY:linear  
 CLONE:HUMGS07753  
 SEQUENCE DESCRIPTION:  
 45 GATCCCGCCA CTGCACTCTA GCCTATGTGA CTCTGTCTCA AA 42

SEQ ID NO:6576  
 SEQUENCE LENGTH:48

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07754

SEQUENCE DESCRIPTION:

GATCATTGT AAGACCAAAA TATAAATAAA AAGTTTCAAA AATCTAAA 48

SEQ ID NO:6577

SEQUENCE LENGTH:46

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07755

SEQUENCE DESCRIPTION:

GATCGATTAC AATAAATGTT TTTCTAAAAA GCCATTTTCC CACAAA 46

SEQ ID NO:6578

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07756

SEQUENCE DESCRIPTION:

GATCAAAAGC TTTGCATTGA TAAGTGCTC ATAATATTG CTGTGATTGG AGAAAAAATG 60

TAGTCGTAGC CAATAAATTT TATCAGCTTT TAAGTTTCAG TATTATTAAA CCATTTTCAT 120

ATAAA 125

SEQ ID NO:6579

SEQUENCE LENGTH:36

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07757

SEQUENCE DESCRIPTION:

GATCAAATGT GAAATAAATA TGAATGGAGT GGTAAA 36

SEQ ID NO:6580

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07758

SEQUENCE DESCRIPTION:

GATCTCTGGC CCTTGCGTT TCAGTATTG TCCTTTTAT GCCTGAATGT TTAACCTGCC 60

ACATNTTGT ACTGCAACAT GAATCTTGGA AATTTAATG TTATGCATTT NAAANGTTT 120

TGGTTATCTG TAAACTAAAT GTGCCCTTAT TGGCTNGGNG GTCAAGTNAA GATGTTTGT 180

TAATGTATTN GTCAGNAAA 199

SEQ ID NO:6581

SEQUENCE LENGTH:66

EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07759  
 5 SEQUENCE DESCRIPTION:  
 GATCTACTGT GATGTTGTCT TCAAAGGCAG GNGAAAATAA TGTTACAAT AAAATGTGCT 60  
 AACAAA 66

10 SEQ ID NO:6582  
 SEQUENCE LENGTH:135  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07760  
 15 SEQUENCE DESCRIPTION:  
 GATCTGTAAA GAATGACTTT CAAGGATAGT TCTTAGGGGA CTGTGAAAGT GTTGGGTCTT 60  
 ACTCNAGGAT GCCTGCATGG GACCCNACCC GGAGCTGGTG TGGCCATTCC CCAAGTGCCA 120  
 CTGGNCCATG GNNNN 135

20 SEQ ID NO:6583  
 SEQUENCE LENGTH:130  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS07761  
 SEQUENCE DESCRIPTION:  
 GATCAGCCTG GCCAACATGA TGAGACCCCA TTTGTACTGG AAATGCAAAA ATTGGCCAGG 60  
 CATGGTCGCG GGTGNTGTG GTCCCAGCTG CTCGGGACGC TGAGGCAGGN NNNATCGTTT 120  
 GAACCTNGGN 130

30 SEQ ID NO:6584  
 SEQUENCE LENGTH:80  
 SEQUENCE TYPE:nucleic acid  
 35 TOPOLOGY:linear  
 CLONE:HUMGS07762  
 SEQUENCE DESCRIPTION:  
 GATCAAAATGA AAGGCCTATA ACTAAAATCA GCCAGCCCAT GGCCCNCACT AAAGGAACCT 60  
 NCCTCTGCTC CCTNTGCAAA 80

40 SEQ ID NO:6585  
 SEQUENCE LENGTH:48  
 SEQUENCE TYPE:nucleic acid  
 45 TOPOLOGY:linear  
 CLONE:HUMGS07763  
 SEQUENCE DESCRIPTION:  
 GATCAACAAT TTTTGTTTTG ATTAAAATNA GTTTTTTGAA AGTTGAAA 48

50 SEQ ID NO:6586

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EP 0 679 716 A1

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07764

SEQUENCE DESCRIPTION:

GATCCCCCTGC TGGCTGGGGG CAGCTCCCAG GATATACTGC CTTACAACCTG TTTCTAAAGC 60

CCATCCTNCT AACATGGCGA TTCCGGAGGT CAAGGCCTTG GGCTCTNCCC AGGGTCTAAC 120

GGNTAAGGGG GCCACATACC NGTTCCAAGG GGNNTGTCAA GTNGTGAAGT CGTTNTGN 178

SEQ ID NO:6587

SEQUENCE LENGTH:99

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07765

SEQUENCE DESCRIPTION:

GATCAGATGG TTTATAAAG TAATAACCAT AAAGCAAAAA ATAATTGAA AGCCCGTCTA 60

TTCTATGCT CANTAAAGTT AAGGTTTTTC TTCATTAA 99

SEQ ID NO:6588

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07766

SEQUENCE DESCRIPTION:

GATCCTTTGA GCCCAGGAGT TTGAGACCAG CTTGGGCAAC ATAGTGAGAC CCTGTCTCTA 60

CCAAA 65

SEQ ID NO:6589

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07768

SEQUENCE DESCRIPTION:

GATCACAGGG TCAGGAGTTC AAGACCACCC TGGACAATAT TGTGAATTCC TGCCTCTACT 60

AAAAATACAA AAATTAGTCG GGCATGGTGG CGGGTGCCTG TGGTCCCAGC TACTCGGGAG 120

GCTGAGGCCA GAAAATCGGT TGAACCTGGG AGGTGGAAGG TGCCTGAGC CAATATCACA 180

CCAGTGCCT CCAACCTGGT GACGN 205

SEQ ID NO:6590

SEQUENCE LENGTH:57

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07769

SEQUENCE DESCRIPTION:

GATCTCATAC TCAACAGAAG GAGACTCAGA GACTCCAGAA GGCACAGGAG CTGCCCN 57

EP 0 679 716 A1

5 SEQ ID NO:6591  
SEQUENCE LENGTH:184  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07770  
SEQUENCE DESCRIPTION:  
GATCATGTTT ATTTACTGAT AAAACTCAAT ACCTAGAAGT GCACCTAGCT CATGATGGTA 60  
CCTAATAAAT ACTTCAATGA AATGATGTGG TGATGCATGC CTATAGTTTT AGCTACTTGG 120  
10 GAGGGTGGCC TGAGCCCAGG GGTCTAGAC CAGCTTAGGC AACATAGCAA GACCCCATCT 180  
CAAA 184

15 SEQ ID NO:6592  
SEQUENCE LENGTH:165  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07771  
SEQUENCE DESCRIPTION:  
20 GATCTGAATG GTTTTAATAA GTGCCTGGNA TTCCCTTAC TGGCTCTCAT NCTNACTCTT 60  
GCCGCCCTGT GAAGAGGTGC CTTCCACCGT GATTGTNAAG TTTCTGAGG CCTTCCAGC 120  
CATGTGGAAC TGTGAGTCGA AAATNAAACC TCTTTTATAA TAAA 165

25 SEQ ID NO:6593  
SEQUENCE LENGTH:134  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07773  
30 SEQUENCE DESCRIPTION:  
GATCCAAGCT TAATTTTCAA ACAGCTTCCC AAAAAGCTGT ATCCTGAATA TCATAAAGTC 60  
TATCATATGA TGTGTACTCA GTCATATTCT GTAGACTCAA ATCTTTTATC TGATTATACC 120  
AGCTTTCCCG NAAA 134

35 SEQ ID NO:6594  
SEQUENCE LENGTH:148  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
40 CLONE:HUMGS07774  
SEQUENCE DESCRIPTION:  
GATCTGCCCC CGTTGGCCTC CAAAGTGCTA GGATTATAAG TGTGAGCCAC CACACCAGGC 60  
CCGTTTCATC CCGTGCCTCAG CCGTGCATGCC AAGCTCCCTN GGTGCCCGNC CACAGGTGTC 120  
45 ACCCTTTNAG GAGAANGTGG CCTGGGGN 148

50 SEQ ID NO:6595  
SEQUENCE LENGTH:238  
SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear  
 CLONE:HUMGS07775  
 SEQUENCE DESCRIPTION:  
 5 GATCGCTTGT AGCTGGGAAC AGTGCTTACT TCAGGGAAAA CTGATTTTGA TAGAACCGAC 60  
 TAGTTGAGTA TTAAACTGTT TTGGAAATAA TTTATATATC TAAGTGCTGA AATATATTTC 120  
 TCTTCTCCCC ACTTATTCAA ATAAAAANGT TTNATACTA TAAACTTTTC NNGTTAGCG 180  
 CCACGCAGTC CTTGTCAAGN TTGTNCTGGG GGNCAANAAC TTGATGTATA AAGCATGN 238

10 SEQ ID NO:6596  
 SEQUENCE LENGTH:102  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS07776  
 SEQUENCE DESCRIPTION:  
 GATCTCTACT ACCANAAGGA AAATAGTTTA GGNGAAACCA GCTTTTANTG TTTTGTAAA 60  
 ATTAGCTTCA CCCTGTNATG TTANCAAGGT ATGTCTTTGC CN 102

20 SEQ ID NO:6597  
 SEQUENCE LENGTH:65  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS07777  
 SEQUENCE DESCRIPTION:  
 GATCGCGCCA CTGCACTCTA GCCTGGGTGA CCAGCCTGGG TGACAGAGTG AGNCTCCGTC 60  
 TCAAA 65

30 SEQ ID NO:6598  
 SEQUENCE LENGTH:282  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS07778  
 SEQUENCE DESCRIPTION:  
 GATCTAGAAG AAAGTATTGT ACGTTTGAAT GCAGATTTTN ATCCACAGAT AGTTGTAGTG 60  
 TTTAGACATG ACAGGACCTA TCGTTGAGGT TTCTAAGACT TACTATGGGC TGTAACCTG 120  
 TTTTNNAAAA CTATTTTAGA AACCTGAGAC TTGCCGTCTG GCATTNAGT TTAATACAAA 180  
 40 CTAATGATTG CATTTGNAAG NGNTNCTTGA CTTATTTCT AAACGTCTAG NGCTCTGAAA 240  
 TGTCTTGCTG GNNGGTATTA AACTATTTGC CTGTNGTACA TN 282

45 SEQ ID NO:6599  
 SEQUENCE LENGTH:173  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07779  
 SEQUENCE DESCRIPTION:  
 50 GATCAATGG CTTAGAGNTA GTCCTGGAAT ATTCATATTC AAAGATTCCT TATTAATGAA 60

55

TGTCCTTAAC TTAATCTAC CCAATAATTG CAACATGGTT CTTTGTACAT TTTCATTATA 120  
 TGGTGTTAAC AAGCTTCACT GCAAACAAAT AAATTACTTA AGTTATTTGN AAA 173

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SEQ ID NO:6600  
 SEQUENCE LENGTH:263  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS07780

SEQUENCE DESCRIPTION:

15

GATCAGTGTA GCAAATNAGG GATGAAGNGT TCAAACCTTT TGGCCCTTTC TTCTTTNCT 60  
 AGGCTTCTCC CTCGCAGGGT GTCCCGTAGT TTCTTCTCGA GCCAATGCAT GTATTATAGC 120  
 AGCAGGTGTC TTTGTGCTTT CTCATCATAG TAACGTAATA CTTGTAAATA CATTITNCTA 180  
 TTINCTATTT TTTTGTATTT TTTTGTGACA TTTTGTTC A TTGGTGTGCT GNGNGNNNCC 240  
 CATGCCCTCA CTCCTTAAAG AAA 263

20

SEQ ID NO:6601  
 SEQUENCE LENGTH:51  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07781

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SEQUENCE DESCRIPTION:

GATCCAAAAT TCTCAACAAA ATATTAGCAA ATTGAACCCA CCAAGGTAA A 51

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SEQ ID NO:6602  
 SEQUENCE LENGTH:283  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07782

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SEQUENCE DESCRIPTION:

GATCAAAGGC CTCTNAGGGG TGTCCACCAA AAACCTCTCC TTCAAAGAG AAGACTCCGT 60  
 GCTTCAGGGC TATGACATCA ACAGCCAAGG GGAAGAGTCC ATGGGAAATG CAGAGCCCCT 120  
 TAGGAAGCCN ATCAAAAACC GGNGCNTANN GTTAANGAAA GTGAACTCCC AGGAAATACA 180  
 CATGCTCCCA ATCAAAAAC AACGGCTGGC CACCTTTTTT CCAAGAAAGT AAATAACGGC 240  
 TTTTAAANT NNGTATGNTT ATAATATGGG GAAAGGTGCA TTN 283

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SEQ ID NO:6603  
 SEQUENCE LENGTH:223  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07783

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SEQUENCE DESCRIPTION:

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GATCGTTCAT CCGATTGCNA CGTTCCAAAG TGTCCAGGTT TTTAAGACCT TACAAATGAC 60  
 TCAGCCCACG TGCCACTCAA TACAAATNTT CTGCTATAGG GTTGGTGGGG CAGAGCTGTC 120  
 TTCCTTCTGC ATGTCAGCAC AGTCGGGTAT TGCTGCCTCC CGTATCAGTG ACTCATTAGA 180  
 GTTCAATNNN NATAGATAAT ACAGATATTT TGGTAAATTG AAA 223

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SEQ ID NO:6604

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07785

SEQUENCE DESCRIPTION:

GATCACCTGA GCCTGAGAGT TCCAGACCAN CCTGGGCAAC ATAGCGAAAC TNCATCTCTT 60  
 TAAAAATAAA ATAAAAATTAA AATTAATACA AATAATTAAA 100

SEQ ID NO:6605

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07786

SEQUENCE DESCRIPTION:

GATCCCTTCC ACTCAGGATT CTCGCCGCCT TTTCTAAGAA AATAATAAAA AAAAAATNCT 60  
 TGTTTCAAA 69

SEQ ID NO:6606

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07787

SEQUENCE DESCRIPTION:

GATCTGCCTG CCTCGGCCTC CCAAAGCGCT GGGATTACAG GCGTGAACCA CTGCGCCCAA 60  
 CCTTTGGATT ATTTTGTGA GAGATGGGGC TTCCCTATGT TGGCNAGGCT GGTCTCAAAC 120  
 TCCTGGANTC CAGCCTGGGC GGCAGAGCAA AACCTTGTCT CAAA 164

SEQ ID NO:6607

SEQUENCE LENGTH:73

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07788

SEQUENCE DESCRIPTION:

GATCACTCCT CTGCTTCAGC CTGGGCAATT GAGCCAGACT CTGTCTCAAA AATAAACAAA 60  
 AAAACTTGAC AAA 73

SEQ ID NO:6608

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07789

SEQUENCE DESCRIPTION:

GATCTTTTGA CCTGGATATG TCTGTAAGGC TCCTGAAAGA GACAAATAAA GTCAATATAT 60



TTNCACAGTG CAAA

74

SEQ ID NO:6609

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07790

SEQUENCE DESCRIPTION:

GATCTTAGGT CAAATAACAG ACTTGAGAAT ACTTTATAAA CTGCCATGAT ACAGCAAA 58

SEQ ID NO:6610

SEQUENCE LENGTH:139

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07792

SEQUENCE DESCRIPTION:

GATCGNGNGC GTTTAACGCT GGTGGGCAGC AATAAGGGGC AGATGTGACC AGATGCCTGC 60

NTCCCCAGGG TGCCGAGGGC AGCAGGAAAA AGTGGGGACC TCGGTGCATT TGCCCCACCC 120

NTCCCTTNC TGGGCTAAN 139

SEQ ID NO:6611

SEQUENCE LENGTH:75

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07793

SEQUENCE DESCRIPTION:

GATCATCGAC ACTTCGAACG CACTTGCAGC CCCGGGTTC TCCCGGGGCT ACGCCTGTNT 60

NAGCGTCGCT TGAAG 75

SEQ ID NO:6612

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07794

SEQUENCE DESCRIPTION:

GATCTGGGGG AGGAAGTCA AGGAAGGCAC CACACCAGAA ATNGGACCTA AATTAAGGCT 60

TAAAGAATGA GCATGGCCAC ACTGTCAGTN AGTGTTCTTT AGTGGTAGG ACTATGGTTG 120

ANATTTTCNT TCTTCCTATC TTCCTGCCTT TTTCAGGNNN TNAATATTAA N 171

SEQ ID NO:6613

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07795

SEQUENCE DESCRIPTION:

GATCACGATG TAAATAATTA AGCATTTTGG TTGGATTCT TTTGTAATAA ACTATTTTGG 60  
TACCATAAA 69

5 SEQ ID NO:6614  
SEQUENCE LENGTH:271  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07796

10 SEQUENCE DESCRIPTION:  
GATCTAGGAT AGCTAAGTNA CCTACATGGT GACTGTTCGG TCTAATTCAG AACAGAAGT 60  
ACTAAAAGAA TACTAAAAAG TTTTACCCA TTATCTCTAT CCCTGTTTN TTTTGCAAT 120  
TCTCAGCNGN AGGGAGCAAG AAAATACACA GCAGNGGGG GAATGTTGT TTGCATCCTG 180  
15 GCTTTCTCAA CCGCACTTA CGTCCTTGAA TATNCTAGAT ATTTACTCCT TCAAGAAGTC 240  
AGGAGTATAT CCAGGCCTAC CTATCNCCT N 271

20 SEQ ID NO:6615  
SEQUENCE LENGTH:237  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07797

25 SEQUENCE DESCRIPTION:  
GATCACACCA TGGAGACTTT CTACTAGAGG ACTTGAAAGA GAACTGAGGG GCCACAAAAT 60  
AAACTTCACC TTCCATTAAG TGTCAAGCA TGTCTGCAA TTAGGAGGNG GTTAGAAACA 120  
GTCTTTTCA TCCTTTGTGA TGAAGACTGA AATTGTGCCG TGTGCTTA TATGANTATG 180  
CAGTATGGGA CTTTGAAATA ATGATTCATA ATAAATACT AAACGTGTGT CTTCAA 237

30 SEQ ID NO:6616  
SEQUENCE LENGTH:196  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07798

35 SEQUENCE DESCRIPTION:  
GATCTNAAAT AAAATTCAAA CTCTACTTCT GTTGTCTAGT ATGTAATTGA GCTAATGATT 60  
CATTGGGAAT ATACCTTTT ATACTCCTTT ATCATGGTAC TGTAAGTGA TCCATATTAT 120  
AAATATAATT ATCTNAAGGN TTTTNAATTT TTNTTATGT CCAAGNGCCC ACGTGAATTT 180  
40 NCTGGTGAAA GTNAGN 196

45 SEQ ID NO:6617  
SEQUENCE LENGTH:75  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07800

50 SEQUENCE DESCRIPTION:  
GATCATCGAC ACTTAGAACG TACTCCNGNC CCCGTGCTCC TCCAGAACCT ACGNCTGCAC 60  
TAAGCGTCGA TAAA 75

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SEQ ID NO:6618  
 SEQUENCE LENGTH:50  
 SEQUENCE TYPE:nucleic acid  
 5 TOPOLOGY:linear  
 CLONE:HUMGS07801  
 SEQUENCE DESCRIPTION:  
 GATCACGCCA CTGTACTCCT GGGCAACAAA GCGAGACTCC CTGTCTCAA 50

10 SEQ ID NO:6619  
 SEQUENCE LENGTH:208  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS07802  
 SEQUENCE DESCRIPTION:  
 GATCGAGGCT TGTNATGCCT TGTGAGAAAT AAGGGCCTTA ATTTGTACTG TCTGCGGCAT 60  
 TTTNATAAT ATTGTATATA GTGACTGACA AATATTGTAT TACTGTACAT AGAGAGACAG 120  
 GTGGGCATTT TTGGGCTACC TGGTTCGTTT TTATAAGATT TTGCTGGGT GGTTTTTTTT 180  
 20 TTAATTAAAA AGTTTTGCAT CTTTTAAA 208

SEQ ID NO:6620  
 SEQUENCE LENGTH:151  
 25 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07804  
 SEQUENCE DESCRIPTION:  
 GATCAGGAAG CCAAACCTAA GAAAGAGCTT GAAAATACTG CTCTAGAGCT TAGTCAGAAA 60  
 30 GAAAAACAGT TTAATGCCAA AATGCTGGAA ATGGCACAGG CTAATCAGC TGAATCAGT 120  
 GATGCAGTGT CAAGACTGGA AACAAACCAA A 151

SEQ ID NO:6621  
 35 SEQUENCE LENGTH:33  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07805  
 SEQUENCE DESCRIPTION:  
 40 GATCTNGGCA ACACAGTCAG ACTCCGCTG AAA 33

SEQ ID NO:6622  
 SEQUENCE LENGTH:321  
 45 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07807  
 SEQUENCE DESCRIPTION:  
 GATCCGGACG ACGTAATCAC TGACATTNAG ATGGTGGACG AGGGCTGGTG GCGGGGACGT 60  
 50

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EP 0 679 716 A1

5 TGCCATGGCC ACTTTGGACT CTTCCCTGCA AATAATGTCA AGCTTCTGGA GTNACTAGAG 120  
CTCACTGTCT ACTGCAACTN TAATTTCCCA TGTCCAAAGN GGNCTCTGCCT CCACCCCTC 180  
CCTATTCTCTG CTGCAAATNT CTAACCAGAT GAGGTTCTGG ACAGACTTCC CTCTCCTGCT 240  
TCATTAAGGG CTTGGGGCAG AGNCAGCATG GGAAGGAGG TCCCCTTCCC CAAGAGTCCT 300  
CTTCTATCCC TGGATGAANN N 321

10 SEQ ID NO:6623  
SEQUENCE LENGTH:96  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07808  
SEQUENCE DESCRIPTION:  
15 GATCCAGCA CCCATTCTT AGCTATTTAT CCCTTCTCTG GTTCCGAAA GGCAATTATA 60  
TCTATTATGT ATAAGTAAAT ATATTATATA TGAAAA 96

20 SEQ ID NO:6624  
SEQUENCE LENGTH:242  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07810  
SEQUENCE DESCRIPTION:  
25 GATCTAGGCT TCTNGCCTCA CTCCCATTAG GAATAACACC CAGCAAAATG GAACTATCCA 60  
AGCACTTCCT ATACATCTGT CTCCCATTG TCTCTTAAGA AGTTTCTTCA GCTGGTGCGC 120  
CATCATCATC ACCATGACTG CCCCAGCTC TTGAGGAAAG GNATAATTAC CTCCATGGTG 180  
TTGCCTCCTA TTGCCTAAA GCACCAGAAA TAATATTAAA TACACCAGAT TAACTACANA 240  
AA 242

30 SEQ ID NO:6625  
SEQUENCE LENGTH:97  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
35 CLONE:HUMGS07811  
SEQUENCE DESCRIPTION:  
GATCCCGTCC TTGTCAGAGA AGTGTTCCTT GGATGAGCGC CCAGAGGGAG GAGCCCATGG 60  
CCCTTCTTC TGTNACTGAT TAAAAATCTC GATGAAA 97

40 SEQ ID NO:6626  
SEQUENCE LENGTH:98  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
45 CLONE:HUMGS07812  
SEQUENCE DESCRIPTION:  
GATCCCTTCA AGACTTTGTC ACAGCCTCTA TCACACATCT GTTTTCTCG AAGNAAAAA 60  
TATAATTAAT AAAAATGTTT TACTCTTTTA CACTGAAA 98

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5 SEQ ID NO:6627  
 SEQUENCE LENGTH:36  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07813  
 SEQUENCE DESCRIPTION:  
 GATCCCGNTG TTCTTAATAA ATCCTGACTT CCCAAA 36

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 15 SEQ ID NO:6628  
 SEQUENCE LENGTH:35  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07814  
 SEQUENCE DESCRIPTION:  
 GATCAAAAAT AAATACTGCA CATAAANA AAAAN 35

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 25 SEQ ID NO:6629  
 SEQUENCE LENGTH:77  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07815  
 SEQUENCE DESCRIPTION:  
 GATCTTGTTT TTATTGTAT TGCTTTTATT ATNATTGCTT TTATTATCAT TAAAACTCTA 60  
 GTTCTTGTTT TGTCAA 77

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 35 SEQ ID NO:6630  
 SEQUENCE LENGTH:98  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07816  
 SEQUENCE DESCRIPTION:  
 GATCCAGTAC AGAAAGGAAA GGNTATTAT TGATTAACAG AAGTTGTCTT TTTAAAAGTG 60  
 TTTATTTTGG GCAATAAAGA GCACAACATA ATCTCAA 98

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 45 SEQ ID NO:6631  
 SEQUENCE LENGTH:132  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07817  
 SEQUENCE DESCRIPTION:  
 GATCAGGGAA CAAAATCCTC TCCTTGTTGGA AATATCCCAT GCAGTTTGTT GATACAACTT 60  
 AGTATCTTAT TGCCTAAAA AAAATTNNCT TATCNTTGTT TCAAAAAAGC AANNTCATGG 120  
 ANAATTTTGG TN 132

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 55 SEQ ID NO:6632

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07818

SEQUENCE DESCRIPTION:

GATCAACGGC TGACCTTCTG GCGTCTGGGG CATGGTGAAC CCACCTNCAT GAATAGCACT 60  
 GTGTTCCATG TGCCTGANGT GGCTGACATG GACTGCTGGC CTGTAAGCCC TGAGTTTGGC 120  
 CACCGTTGTG CCCTTGGGGG TCAGGGGNTT NAGGTTTACA ACTGGTATGA CTGAGGTATC 180  
 CTGCGGTGGC TGGCGTGCTG GGCATGGGGC NTGCTCACAG ACAGNATGGA GCAGGGAAGG 240  
 GCTGTCCTGT GCCCATGCTC AGCTTGNCCT TNNNGNNGAN GGAGGTNGTG GCCGTGGGTN 300  
 CCTN 304

SEQ ID NO:6633

SEQUENCE LENGTH:35

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07819

SEQUENCE DESCRIPTION:

GATCTCAAAT AAAATTNCTG TAAAGAATTT CCAA 35

SEQ ID NO:6634

SEQUENCE LENGTH:185

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07820

SEQUENCE DESCRIPTION:

GATCCAAATC GGGCCATCTT CATTGCCATG AGTGTTCGGA CAGGCTCTGC GTGCCAGGCA 60  
 ACAGTGGGCA GACAAAGGCG TCCCTGGCTA CTGGGAAGAT ACAGAACCAT CCTGTGAAAA 120  
 TCATTTCAGC ACTGGAGACC TTCTTTGCTA TTAATTCTTT CATTAACAAT GACCTCTAAT 180  
 TTAAT 185

SEQ ID NO:6635

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07821

SEQUENCE DESCRIPTION:

GATCCGTGGC CTGAAGGTTT CTAGAGNCGT CAAGAAATNA ATATCTTACA CTGTGATTCT 60  
 GTGAGGAAAG ACTGGTAACC CAAAATCTC TTCTCTAATG TATTTTNNAA CGNAAATGAC 120  
 AATATTCTT TAATAAAGTA TTTATACCAA A 151

SEQ ID NO:6636

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

# EP 0 679 716 A1

CLONE:HUMGS07822

SEQUENCE DESCRIPTION:

5 GATCCAGGTC TAGGCCCTTN ATCTGCTGCT CTGTGGCCCA GGGCAGGTTT GCTTGACCTC 60  
 TGCCTCAGTT CTCGACTCTA AAGGACATAC TGACCTACCT CACAGGGGTG TTGTNAGGAT 120  
 TAATAAATNT TGGTACTCTG CTTTGGAAT NTGAAAAAA AGAAA 165

SEQ ID NO:6637

SEQUENCE LENGTH:71

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07823

SEQUENCE DESCRIPTION:

15 GATCAAATTC AGTGTGTAT GTATGTTTAT GGCAACATTT TGAATAATAA AATTAAATGT 60  
 TTNCTTCAA A 71

SEQ ID NO:6638

SEQUENCE LENGTH:348

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07824

SEQUENCE DESCRIPTION:

25 GATCTCAATA CTTCCCTGAC ATCCCTTAAG ACTCAAGTCT TGATACTTTG TCTGCTCTCT 60  
 GGCTCTTTCT TTGTCAATTAC TATNATNNNA ATCTTCTTGA TGTTGACTCT TGCTAAAATT 120  
 TTTNGTCTTC CTTATTGTTA ATGCTTATAG AAAATGATTC CTTGTATCT TTNAGCCCAT 180  
 GTCATCCGAA TCATTGCTG TTTCTAGCCT AGGTGCTTTG ACTATGCCAG CTGTATTTC 240  
 TNCAGAATTT NCATTANCTA TATGTGTGGT ATTGTAGGCA TTACCATATT TNAATAATAA 300  
 30 NTTTAGGCCA TTGCTTCAA TCACAACAA NNACAACNCA ACNNACNN 348

SEQ ID NO:6639

SEQUENCE LENGTH:53

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07826

SEQUENCE DESCRIPTION:

40 GATCTGAAGA GTGAAATAA TGCTTTAAAT NAAAAATTGA AATCAGAAGG AAA 53

SEQ ID NO:6640

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS07827

SEQUENCE DESCRIPTION:

50 GATCTTTTTN AATTCAGTAC AACCCATAAT CATGTAAATN CTCATTNCT TTAGGNCATA 60  
 AAGAGAGCCC TAGGGTGCTC TGAATGTGTA CATGTNCTTG TCATAAAATG CATACTGTTG 120  
 ATACAAA 127

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5 SEQ ID NO:6641  
 SEQUENCE LENGTH:23  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07828  
 SEQUENCE DESCRIPTION:  
 GATCTGTTGT TACTTAACAG AAA 23

10 SEQ ID NO:6642  
 SEQUENCE LENGTH:85  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS07829  
 SEQUENCE DESCRIPTION:  
 GATCTTNATG TTAATNTTCA GAGGACTCTA GACAACAACT TAGCAACTGA AGCTTATNAA 60  
 AGAAGAATTA AGCGCCTGA GCAAA 85

20 SEQ ID NO:6643  
 SEQUENCE LENGTH:113  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS07831  
 SEQUENCE DESCRIPTION:  
 GATCTTTTGT GGATATTTGT CACTTGGTTT CAGAAAGTNC ACAAATGTAG CAACAGCTCA 60  
 CATGACTGAG TAGGTAGAAA ATGTGAAATA AATCTCATAT ATATNGTTTT AAA 113

30 SEQ ID NO:6644  
 SEQUENCE LENGTH:54  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS07834  
 SEQUENCE DESCRIPTION:  
 GATCGTCCCG CTGCACTCCA GCCTGGCCAA CANAGCGAGA CTGTCCCCC CAAA 54

40 SEQ ID NO:6645  
 SEQUENCE LENGTH:59  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07835  
 45 SEQUENCE DESCRIPTION:  
 GATCTTGCTC CTCTGTAAGG AACAAAGGTG CCTAATAAAT ACATTNCTCC TTTATTAAA 59

50 SEQ ID NO:6646  
 SEQUENCE LENGTH:184

55



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07836

SEQUENCE DESCRIPTION:

GATCCAGGGT CCCCAGGGT GGGCTCAGCT CCAGGGAGAG GCCACCCACG TGGCAGCCCC 60  
 ACCTCTTGAG AGCCCCCAGT GCCGGAGCAG AAAGGACCCT GGACCCNGAG GCAGNNACTG 120  
 CGGGGTGGTA GAAAAGGTAG AGTAGGCTGT GGCAATGGAA TAAANCACGA TAAAAACGT 180  
 TAAA 184

SEQ ID NO:6647

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07837

SEQUENCE DESCRIPTION:

GATCCTTCCC CTGCAACCAG ACAGTCTACA ACTGCCCCCT CCAGCCCATT TNCTGCCGTG 60  
 AAACCCACAG CAGCCANACC AGGCTCTGGA ACCCTTTTTC GACTAGGNC ACTCTTGNC 120  
 ACCAGNGGG GTAGAACACC NAACACCAA CTGTACAGAN TNTCCN 166

SEQ ID NO:6648

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07838

SEQUENCE DESCRIPTION:

GATCTNTNAT GGTACGACC ACCCGCNTAC CCAGTTCCTC CAGTGGAGAC CAGTTGGGTA 60  
 GTGGTACTG GGTACGCTAC AAGCTCTGCA TTGTNTGCTG ATGGGACGCT CTTCAAGGTG 120  
 CAAGTAACCA GCCAGAACAT GGGCTGCCAA ATCTNAGNCA ACCCCGGTGG AAACACTNAT 180  
 TAAAAGAACC CCAGAGGACA CCAACAGGTG TNTATCTGGN CNTGNCN 227

SEQ ID NO:6649

SEQUENCE LENGTH:314

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07839

SEQUENCE DESCRIPTION:

GATCTTTGGG GTTGGAGTGA AGGTCTTATC TGCATTAATT TTGTTAATGC ACATTGTAGA 60  
 TGTGGAGAAC ATCTTGACCT GCATAAGGAT TGGCTCTCAT TTTATTGTGT AGTGCTTTTT 120  
 CGAAATATTT ACATTTCTTT GGTCCCATG TTCATGTATT CTGGAGAAGT AAAATTTCTT 180  
 GATTACTGGG CAGACCCTAA AACTACTAAG AGAAACATAA CATGTAGTTA GCTGTCTGCT 240  
 CATGGTTTGT TCAAATCTAA GCTAACCTTA ATGGTGCTGT GTCCGCTGTN CACAGAAAAC 300  
 GGCCTTAAAG TAGN 314

SEQ ID NO:6650

SEQUENCE LENGTH:104

EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07840

SEQUENCE DESCRIPTION:

GATCCCCTCC CCTGCCCCCTG GGTTCCTGCC TTCNTCCTC AAGCAGGCAC NNAGGCTTTA 60  
GAGAAGTATA GGGGGCTTCT CCCCTGCNGG GCTTACCACA NTTN 104

SEQ ID NO:6651

SEQUENCE LENGTH:358

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07841

SEQUENCE DESCRIPTION:

GATCAAGATG CCGAACCCTG TGITCAGAAC CTCCAAATAC TGCCATGAGA AACTAGAGGG 60  
CAGGTCTTCA TAAAGGCCCT TTGAACCCCT TTCCTGCCCT GTGTTAGGAG ATAGGGATAT 120  
TGGCCCCCTCA CTGCAGCTGC CAGCACTGG TCAGTCACTC TCAGCCATAG CACTTTGTTC 180  
ACTGTCTGT GTGAGAGCAC TGAGCTCCAC CCTTTTCTGA GAGTTATTAC AGCCAGAAAAG 240  
TGTGGGCTGA AGATGGTTGG TTTGATGTTT TTGTATTATG TATCTTTTGG TATGGTAAAG 300  
ACTATATTTT GTACTTAAAC AGATATATTT TTACCCAGAG TGGGGATATT CTTTGTAN 358

SEQ ID NO:6652

SEQUENCE LENGTH:46

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07844

SEQUENCE DESCRIPTION:

GATCCAGTTT GGGATTATGA AATAAACAC AAATNAAAAT TTAAA 46

SEQ ID NO:6653

SEQUENCE LENGTH:63

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07845

SEQUENCE DESCRIPTION:

GATCTGGGGG GATGGAAAGC AAAATAAAGG AGGTGCCTGG NTGCATTATT TGCAGTGGGC 60  
AAA 63

SEQ ID NO:6654

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07848

SEQUENCE DESCRIPTION:

GATCCACCCA CCTCGGTCTC CCAAAGTGCT GGGATTACAG TCTTGAGCCA CCGGGTGACC 60  
GTCTTACAGG GATATTTTNA ATCCCGTNAT GGACTCTGTC TCCAGGAGAG GGTCTATACC 120

ACCCCTGCTC ATTGGTGGAT GTNAAACCAA TATNCCTTTC AACNGGTGNC TGNTAGGGAA 180  
 AANCTACTCC TCATTATCAT CATTATTATT GCTCTCCACT GTATCCCCTC TACCTGGCAT 240  
 GTGCTTGTA AGTNCTAGTT GTTCAATAAA TTTGTNAATA ATGCTGTAAA 290

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SEQ ID NO:6655  
 SEQUENCE LENGTH:145  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS07849  
 SEQUENCE DESCRIPTION:  
 GATCTTCCTG GAAATNAGCA GTGACTAACG CTCACATAAC TGGTTTTTTT TTTNAACTGG 60  
 GCTGATGAAT ACATTACCT ANGAACTCA TTTCGTTTTA CTTAAGAGGG GANGTGCACT 120  
 TTTNTTTTGG NAGTTCAGAN TCCAN 145

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SEQ ID NO:6656  
 SEQUENCE LENGTH:351  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07850  
 SEQUENCE DESCRIPTION:

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GATCCTCTGG TTTNTTCCAT TGGGGCGGAG TCGGGGGTGG AGGGAGCTGG CCACAACCCA 60  
 CTGCTCTGAT GGGTGGTTTG TCCAAGNATG CTGAATGTAA TGCCTGGTCA ATGTGGAAGC 120  
 CCATNAGGTT GCCCAGGGAA GCCTCCAAAA GCTGGGATGC TTGAGGGTAT CCAAGTTGAA 180  
 AAAGACAAAA TCTGACCATC AGCCAGTGAC AGTCCTGGCA AATNAAGGTG GGGCGGGGCA 240  
 GTNAGGGGTG GGNANGGTG AATNNTTCAT TATCCACCC NGCGGTTTNC TGGGGTGAGG 300  
 GGGAAGANTC GNTGCTTGCT TTGGGCACTG ANGGTTTTTC TGTNNGGGGA N 351

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SEQ ID NO:6657  
 SEQUENCE LENGTH:346  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07852  
 SEQUENCE DESCRIPTION:

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GATCATGTGA AGAAAACAGT GACCATTGAA AATNACCCTC ATCTGCCACC ACCTCCCATG 60  
 TGTTCAGTTC ACCCATGCAG GCATGCTGAG GTGATGAAGA AAATCATTGA GACTGTTGCA 120  
 GAAGGAGGGG GAGAACTTGG AGTTCATATG TATCTNCTTA TTTCCTTGAA ATTTGTACAA 180  
 GCTGTCATTC CAACAATAGA ATATGACTAC ACAAGACACT TCACAATGTA ATGAAGNGAG 240  
 CATAAANCT ATCCTAATTA TTGGTTCTGA TTTTNAAGA ATTAACCCAT AGATGTGNCC 300  
 ATTNCCATA TTCATCANTA TATACAGTTT CTCTANTAGG GGAANN 346

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SEQ ID NO:6658  
 SEQUENCE LENGTH:345  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07853

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## SEQUENCE DESCRIPTION:

5 GATCCACACG CTGCCCCAGG AGTTCGACAT TNACCGCAAG GTGGGCGNAG AGCCTGTNCC 60  
 TGTAACGAGG GATNATTCCA GCAATGGCTT TCCCCGCACT CAGCATGGTT CCCCAGTAAC 120  
 CTCTGTCTGA CCAGCTCCTC GGGGGAGCTG TGGAGGATGG TCGGCATCGG TGGACAGCCC 180  
 CTGGGGCTTTA ATGAATGTGG CATCGTGGCA CAGATTGCAG GTCCCCTGGC TGCCGCTGAN 240  
 ATCTCTGCCT ACTACATCAG CACCTTCAAC TTNNGNNGG GCCTGGTTGC CCGAGGACGG 300  
 TATCGGCAGC GTCATCGNGG GTCCTCCAGN GGNNGGNAGG AATGN 345

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SEQ ID NO:6659

SEQUENCE LENGTH:47

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS07854

SEQUENCE DESCRIPTION:

GATCTTTGTT AAAAAAATAA AAAGTACTAA CATTACAGAC ATGTAAA 47

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SEQ ID NO:6660

SEQUENCE LENGTH:35

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07855

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SEQUENCE DESCRIPTION:

GATCCTGCCA CTGCAGAGTG AAACCTGTC TCAAA 35

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SEQ ID NO:6661

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07856

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SEQUENCE DESCRIPTION:

GATCCCCCG AAGTCTTCAC AGGCACTGCA TCGGGTTGTC TGGCGCCCTT TTCCTCCAGC 60  
 CTAAACTGAC ATCATCCTAT GGACTGAGCC GGCCACTCTC TGGCCGAAGT GGCCGCAGTG 120  
 TTGCCCCCGA GCTGCCCCCA CCCNCTCACA GGGTCCCTCA GNTTATAGGT GCCCAGGCTG 180  
 AGGTGAAGNG GCCTGGGGGN CCTGCNTTCC GGGCGCTCCT GGACCNTGGG GCAAACCTGT 240  
 40 GACCNITTTN TACTGGANTA GAAATNNGTT TTATNATTN 279

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SEQ ID NO:6662

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07857

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SEQUENCE DESCRIPTION:

GATCATAATA TAATTGGTTA CAAAGTGGAA GTGCCAGCTG GCTTAAGTAC CCAAAGAANA 60  
 GAATGCAGCA GCCTAACTTA GTGTTACCAT ATGTTACTGA ATTTGAAACT GACCTTTTTT 120  
 CCCACCCTAC TTCACACACC TAAACTCTT TTTTGTGTCAG ACCAAAGNGC AAA 173

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EP 0 679 716 A1

SEQ ID NO:6663  
 SEQUENCE LENGTH:295  
 SEQUENCE TYPE:nucleic acid  
 5 TOPOLOGY:linear  
 CLONE:HUMGS07858  
 SEQUENCE DESCRIPTION:  
 GATCCAGTTG TCATCCACCA CAGACATCTC ACATCAGATA CAGACAGTTC CAAGATTGAC 60  
 AACAGAGAAC AACCTGCTGG AAAGACCTGG GCAGAAATGG AGAGCCCTGC GGAACCATG 120  
 10 CTACATTTTC ATCTAAAGAG AGAATGCACA TCTGATGAGA CTGAAAGTNC TTTNTTGTTC 180  
 TAGATTGTAG AATGGTATTG ANTTGGTCTG TGGAAAATTG CATTGCTTTT ATTTCTTTGT 240  
 GTAATCAAGT TTAAGTAATA GGGGATATAT AATCNTAAGG CNTTTTAGGG TGGCN 295

15 SEQ ID NO:6664  
 SEQUENCE LENGTH:285  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07859  
 20 SEQUENCE DESCRIPTION:  
 GATCATGGTC AGANTGGAGT ACCTGGGGGC TGTCCATGCC CCCCTTTGGA CCTAATCCTA 60  
 CCCGTCCCGG CCAGCCCTC TCCACACCNT TNCTCCCCAA GTACCCGCC ACCGTTTCCA 120  
 TGGTCGAAGG TCAGGGCGAG AAGAACGTGA CTTCTGGGG GAGACCGCTG CCACGGGTGTG 180  
 25 AGGAGCTACA AGGGCAGAAG CTGGTGGTGG AGGNGNNACG ACCATNTNTA CACGTGCCTG 240  
 CTTGCAAAGA CCCTGAGGAA GAGGAAGTCT AACANTNTT TCCTN 285

30 SEQ ID NO:6665  
 SEQUENCE LENGTH:47  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07860  
 SEQUENCE DESCRIPTION:  
 35 GATCCTGTGA GTCAGTGTGG TTCATCAAAT AAAACTGTTT GTGCAAA 47

40 SEQ ID NO:6666  
 SEQUENCE LENGTH:75  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07861  
 SEQUENCE DESCRIPTION:  
 GATCTCTAGA GCTGTCTGTG CGCCGCCAG GATTGACCTG TGTGTAAGTC CCAATAAACT 60  
 45 CACCTACTCA TCAAA 75

50 SEQ ID NO:6667  
 SEQUENCE LENGTH:286  
 SEQUENCE TYPE:nucleic acid

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# EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS07862

SEQUENCE DESCRIPTION:

5 GATCCTGCCT GGNCAACCCCT TTCCTGTCCC AGGCCCTACA TTCAGCAGAA ACGCACTTTG 60  
 GACTTTNTCC TTTANATAAA AGAAAGACAT CCCAGGAGAA GGACAAACCA GAGGAGTGAA 120  
 CCAACAAAGA GTACCTAGGA ATGGAAGTTG AGCCCTGGAA TGGGGCTCCA TGGAGAGGTG 180  
 CATAGGACTC GGCAGAAATG GCCTCTCCCC AAAGCCTCTT TTNAGAGGA GAGGGAAGCC 240  
 10 TATTTNTTA ACTGGTTTGG GATAGGGAAT GGGGTTNCTT TTTNTN 286

SEQ ID NO:6668

SEQUENCE LENGTH:95

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS07863

SEQUENCE DESCRIPTION:

GATCCCCGCC TGGCCAGGNG CAGGCACGGG TGGTCCCNGT TCCACCCCAA GAGAACTCGC 60  
 20 GCTCAGTAAA CGGGAACATG CCCCTGCAG CCAAA 95

SEQ ID NO:6669

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

25 TOPOLOGY:linear

CLONE:HUMGS07864

SEQUENCE DESCRIPTION:

GATCTCCTAA TGATGTATTG TGCCGTGGNA GTACTGTGTG TGAATAGCAG TAGTGGGGGC 60  
 AAAAGCAATC TTCTCATTTG GAAATGTTGT AAATAATTTT ATTATATAGT GTTTTGGATG 120  
 30 TATTTGTTGT AGAAATGGNC CAGTGAATAA AGAGAATCTA AGGNTTTGTA CAATGTGAAA 180  
 TAACGTGTTA AATAANTGTC ATTGTCATAG AAA 213

SEQ ID NO:6670

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS07865

SEQUENCE DESCRIPTION:

GATCTAAAGA CCCGGGAGCG AGAAGCCAAG GCCAGGTTCT GGGNGNAGGG CCCAGAGAAG 60  
 CAGAACAGCC CAGAGCCCCA GGTGCCTGGC CTGGGCTAGA CCTCTGGAAT TGAGATTAAA 120  
 CAATTGGAG TTGAAA 137

SEQ ID NO:6671

SEQUENCE LENGTH:276

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS07866

SEQUENCE DESCRIPTION:

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# EP 0 679 716 A1

GATCCGCTAC AGCAACGTGA AGAAGCTGGA AATAAAGCCA AAGTACCCGC ACTGCGAGGA 60  
 GAAGATGGTT ATCATCACCA CCAAGAGCGT GTCCAGGTAC CGAGGTCAGG AGCACTGCCT 120  
 GCACCCCAAG CTGCAGAGCA CCAAGCGCTT CATCAAGTGG TACAACGCCT GGAACGAGAA 180  
 GCGCAGGNTC TACGAAGAAT AGGGTGAAAA ACCTCAGAAG GGAAACTCC AAACCAGTTG 240  
 GGAGGCNTTG TGCAAAAGGN CTTTGCAGN TTNAAG 276

SEQ ID NO:6672

SEQUENCE LENGTH:348

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07868

SEQUENCE DESCRIPTION:

GATCCTGGAC CAGTCAGAAG CCGAGAAAGC TCGCAAGGAA CTTTGGAGC TGGAGGCTCT 60  
 GAGCATGGCC GTGGAGAGCA CCGGGACTGC CAAGGCGGAG GCCGAGTCCC GTGCGGAGGC 120  
 AGCCCGGATT NAGGGAGAAG GGTCCGTGCT GCAGGCCAAG CTAAAAGCAC AGGCCTTGGC 180  
 CATTGAAACG GAGGCTGAGC TCCAGAGGGT CCAGAAGGTC CGAGAGCTGG AACTGGTCTA 240  
 TGCCCGGGCC CAGCTGGAGC TGGAGGTGAG CAAGGCTCAG CAGCTGGCTG AGGTGGAGGT 300  
 GAAGNAGTTC AAGCAGGTTG CCAGAGGCCA TAGGCCCAGC ACCNTNAN 348

SEQ ID NO:6673

SEQUENCE LENGTH:325

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07869

SEQUENCE DESCRIPTION:

GATCTGAGGC CAGCTCCCGT TCCCTGAGCT GCCTCCTGCT TCTCCCTCAA AGTCTCCTAC 60  
 CCTTCTCTTC CTCTTTNAAG CCCTCTCTTC CTCGCTTCC TTCCTACCTA GTCCTTGTT 120  
 GGTGAGCTTN TTGTGCCTTA ATNCTGTGAC CCAGGCCCTT ACACCANTTT NCACCTTCCT 180  
 GTNCGGAGNA CAAGNCACT AGCTGCCCCA GGAAGTTGTG TGATTTTAAA TCACTTCTGT 240  
 CTTTGCTGGA AAGTGATTTT GTGCATAAAT AAAAGTCTGN GGATTTGTGA AAAANAAGA 300  
 AAAANACNNA AAAANAACAN TNAAN 325

SEQ ID NO:6674

SEQUENCE LENGTH:348

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07870

SEQUENCE DESCRIPTION:

GATCAATGGA ATAGAATTTC ATTGGAAATG TAAACACTT TCCCAACAAT GGTCATGACT 60  
 TTCTNCTGTT TTTGAGAAGA GTTTCATATG CTGGACCACA TTTNAGCTTT TATTGTTTTT 120  
 TTTNCCCAT TGTCCAAAAA GTTAAGCAAC AAGTGGCCAC ACTTTTACGT GNTACAACC 180  
 TGGAGTTCTG CAAAGAAGGT AATATTTNCT TGGNCTTGC CTAANGTTAT CTCCCCATTC 240  
 TATGGTTACA TTTTATTTTG GCCTATGGGG CCTTCTAATA CGTTTTGGTA AAGAGGCGAG 300  
 TNAANGNAA TTNCTTGTC AATTCACCT CAAAGGTAAT TTCNTGCN 348

SEQ ID NO:6675  
 SEQUENCE LENGTH:196  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07871  
 SEQUENCE DESCRIPTION:  
 GATCAACTCT CTAATGGTGC TAATGGCAAT CTAGCTAATG TGCAAATTTA GGAAGTCTTC 60  
 AGTACTAAGT ACATAATTTT CAAATAATAT TTTTNAATTG TCTACTTTGG ATGTTAGCTA 120  
 TGTCTTGTGN GTATAGGATT CCAATTTTAA GCACTATTTT GATGCAAAAN AATGCATAAN 180  
 NAATTTANTT TATAAA 196

SEQ ID NO:6676  
 SEQUENCE LENGTH:214  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07872  
 SEQUENCE DESCRIPTION:  
 GATCATAAAA ATGTGCGCCA ACAACGGCAG GCGCCATCTA AAGCAGCTTC TAAACAGAGA 60  
 GAGATGCTCA TNGAAGATGT NGGCAGTGAG GNAGAACAAG AAGAGGAGGA TGAGGCACCA 120  
 TTCCAGGAGA AAGATTCCGG CAGCGATGAA GATTTCCTAA TGGACGATGA TGACGNTNGT 180  
 NACTATGGCA GTTCGAAAAAN GAAAAACANA TNNN 214

SEQ ID NO:6677  
 SEQUENCE LENGTH:138  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07875  
 SEQUENCE DESCRIPTION:  
 GATCCCCCAA GCCTGACGNG CCGNTNACCA TCCCCTCTGC CCTGCAGAGN CAGCCGCCAA 60  
 GGNTGACCTC AGCTTCGGAG CCACCTCTGG ATGAACTGCC CCCAGCACCC GCCCCATTAA 120  
 AGACCCGGAA GCCTGAAA 138

SEQ ID NO:6678  
 SEQUENCE LENGTH:208  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07876  
 SEQUENCE DESCRIPTION:  
 GATCCATCGC AGAGTCCTAA AGAAGAACCC ACTGAAAAAN TTGAGANTCA CAAGCTCCGG 60  
 GTGGATAAGG CAGCTGCTGC AGCANGGCAC TACAAGCCAA ATCAGATGAG AAGGCGGCGG 120  
 TTGCAGGCAA GANGCCTGTG GTAGGTAAGA NAGGAAAGAN GGCTGCTGTT GGTGTTAAGA 180  
 NGCAGAAGAN GCCTCTGGTG GGAAANNN 208

SEQ ID NO:6679  
 SEQUENCE LENGTH:188



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07878

SEQUENCE DESCRIPTION:

GATCTCCTGG AGGCTACAGG GAGCAGAGGC GATGCCCCGA GCGGCGAGCG TGTTCCTCAGG 60  
AGCAGGTGGG CAGGGGCCTT GCAGACTCTT CATTTCTTCC TTCCCTTATC ACCGTTAGCC 120  
ATTTTATG GATAGAGATA CAGAGGAGCT CCCATTACAA AGCGCCATTA AACTGTCATC 180  
TGTGCAAA 188

SEQ ID NO:6680

SEQUENCE LENGTH:35

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07879

SEQUENCE DESCRIPTION:

GATCTTGGTG GTAGTAGCAA ATATTCAAAC GCAAA 35

SEQ ID NO:6681

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07880

SEQUENCE DESCRIPTION:

GATCTTCCGT GGTGAGAGTG CCACTGCGGG AGCTCTGTAT GGTGAGGATG TAGGGGTAA 60  
CTTGGTCAGA GCCACTCTAT GAGTTGGACT TCAGTCTTGC CTAGGCGATT TTTCTACCA 120  
TTTGTNTTTT GAAAGCCCAA GGTGCTGATG TCAAAGTGTA ACAGATATCA GTGCTCCCC 180  
GTGTCCTATC CTTGCCAAGT CTCAGAAAGAG GTTGGGCTTC CATGCCTGTA GCTTTCCTGG 240  
TCCCTCACCC CCATGGCCCC AGGCCACAG CGTGGGAAC CACTTCCCT TGTGNTN 297

SEQ ID NO:6682

SEQUENCE LENGTH:22

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07881

SEQUENCE DESCRIPTION:

GATCCAAGAT ATCACTTAGA AA 22

SEQ ID NO:6683

SEQUENCE LENGTH:292

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07882

SEQUENCE DESCRIPTION:

GATCCAGCTG TGGTTCCAGA GCAGTGAGCT GGTGAGCTGG GCAGATGGGG GCCAGCACAG 60  
CAGNATCCAC CCAGNCTGAG GCTCAAGCTG CCCTTACCAC CCCATCCCC ACGCAGGACC 120

# EP 0 679 716 A1

AACTACCTCC GTCAGCAAGA ACCCAAGCCC ACATCCAAAC CTGCNTGTCC CAAACCACTT 180  
 ACTTCCCTGT TCACCTNTGN CCNACCNCAG CCCAGAGGAG TTTGNGCCAC CAACTTCAGT 240  
 GNCTTTTGT ACCCNAAGNN AGCACAAGAT TGGACCAATA NTTTTGNAG TN 292

SEQ ID NO:6684

SEQUENCE LENGTH:247

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07883

SEQUENCE DESCRIPTION:

GATCTGCCTT AGCCTCACTG CTTGCCCTTA AGTGGTGGGA TTGCAGGTGT GAGCCACTGT 60  
 GCTGGCCTCA AATAGTTTTN ATCAAAGCTA CTTCAATTAG TGGTTAGCAA GGCTTAAAGA 120  
 CTAATTCAGT GCTTTATTTT NACACTNGNT CGCAACATGT TGCTTTTTTN CCTGTGTCCT 180  
 ATGGGACCTA GTCATCTGTA TGTNAGATTC ACAGAGGAAT TAAAGAGATA AACATGCATG 240  
 TNCTAAA 247

SEQ ID NO:6685

SEQUENCE LENGTH:37

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07884

SEQUENCE DESCRIPTION:

GATCCACAAC TACACACATC ATAACCACAC CATCAAA 37

SEQ ID NO:6686

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07885

SEQUENCE DESCRIPTION:

GATCTCTGAG GAGTTCCTG GGGACAACG AGCAGCCTCT GGAGAGGGGC CATTAAATAA 60  
 GCTCAACATC ATTGNACNAA A 81

SEQ ID NO:6687

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07886

SEQUENCE DESCRIPTION:

GATCAGCCTT TCCAGGTGCT TTAGTCGTTT GCCTAGACAC GTTCCTGTCT CCTCTGACAG 60  
 CTGCAGTTGC TCTGCGCTGC TAGACATGGT GGACATTNA GCAGCCTGAC CTGTGGGGAG 120  
 GGGGTCTCTC CCGAAGAGTT TCTGTTTTTA CTCAAAATAA TGTTATTCTC AGATGCTTGA 180  
 TGCAGTGTG GAAATGTGCT CNATTTAATC ATGCAGATAA ACCATTTAAA TGTCAAA 237

SEQ ID NO:6688

SEQUENCE LENGTH:93  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07887  
 SEQUENCE DESCRIPTION:  
 GATCTCTTGA GCCCAGGAAG CCGAAGCCAC AGTGAGCTGT GATTGCACCA CTGCACTCCA 60  
 GTCTGGGTGA CAAGAGTGAG ACCCCATCTC AAA 93

SEQ ID NO:6689  
 SEQUENCE LENGTH:62  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07889  
 SEQUENCE DESCRIPTION:  
 GATCGCAGCA TTGCACTCCA NCCTGGGCAA CAAGAGTGAA ACTCTGNCTC AGAAAAGAGA 60  
 AA 62

SEQ ID NO:6690  
 SEQUENCE LENGTH:221  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07890  
 SEQUENCE DESCRIPTION:  
 GATCCTCCTG CTTCAGCCTC CCAAAGTGCT AGGATTATAG CCACCGCACC TCGTCTTGAA 60  
 ATAGCCTTTT AAATGTTTAC CTCAGCTTGC CTCACAGTGG GTCTGTTTCT GGTTCCTCAG 120  
 ATGCATAAAG GAAGACATAT CCCTCCCTG GGNAGCAAGG CTACAATGGG AGGGAGGGAG 180  
 AACATGGGAG CATGTGAATA AAATGGCATT AANTACTGAA A 221

SEQ ID NO:6691  
 SEQUENCE LENGTH:210  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07891  
 SEQUENCE DESCRIPTION:  
 GATCATCAAG AAAAAAGAAA CTTAAATGGA CACTTTTAAT GCTGCAAATN AGCTTGTCGT 60  
 GAAGTTACCT GATTGTNTAA TTAGAATGAC TACCACCTCT GTCTGATTCA CCTTCGCTGG 120  
 ATTCTAAATG TGGTATATTG CAAACTGCAG CTTTCACATT TATGGCATT GTCTTGTTGA 180  
 AACATCGTGG TGCACATTTG TTTAANCAAA 210

SEQ ID NO:6692  
 SEQUENCE LENGTH:169  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07892  
 SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCTGTCAT CTTATAGCA CAACAAAACG AAATGATGGA AATNCTCTTN AGCTCACAAC 60  
 ATTTGTTTTN CTTTAAAGT AAATGCAAGT ACCAAAGCTC ACTACTGCGG TTTGCCTGTN 120  
 CCTGGNCANT GAGGCGGAGC NCTGTTGTTT TGTGGGGCA CCCCTTNN 169

SEQ ID NO:6693  
 SEQUENCE LENGTH:226  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS07893

SEQUENCE DESCRIPTION:

GATCTCTGCT TACCGTTCAA GAGGCGTGTG CAGGCCGACA GTCGGTGACC CCATCACTCG 60  
 CAGGACCAAG GGGGCGGGGA CTGCTGGCTC ACGCCCCGCT GTGTCTCTCC TCCNTCCCTT 120  
 CCTTGGGCAG AATGAATTCG ATGCGTATTC TGTGGCCGCC ATCTGCGCAG GGTGGTGGA 180  
 TTCTGTCATT TACACACGTC GTTCTAATTA AAAAGCGCAT TATAAA 226

SEQ ID NO:6694  
 SEQUENCE LENGTH:31  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS07894

SEQUENCE DESCRIPTION:

GATCTCTTAA ATAACTTGC TTCTGGTTAA A 31

SEQ ID NO:6695  
 SEQUENCE LENGTH:182  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS07895

SEQUENCE DESCRIPTION:

GATCTAAATT TGTTTATTTA AGCTGCAAGN AAGTTACATT AATTTGGAAT GTGTCATCAC 60  
 TTGGNCCCAG TATATCAGAT TTTNATTGAG TAAATGTTA AAAATAATAA GTGTAAGTCA 120  
 GATTCTGGAT GTNCGNGTTT ACAATACATT GCCTGTAATA AAAGCTGATT CTGANGTGCA 180  
 AA 182

SEQ ID NO:6696  
 SEQUENCE LENGTH:203  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS07896

SEQUENCE DESCRIPTION:

GATCCCAACC CTGTGTCCTG CCCTGACCCC TGTTCCTCCA CTCGTGGCAC TGTAGCCCA 60  
 GNCCTCCCTA CCGGCGAGAG TCCAGAGTGG GTACAGGAGC AAGGGGCACT GCTGGGGCCT 120  
 GATGGCTGAA GGAGACGCCG GCATCCTCGG GGGCCTGGGG AAGTTGTGTG TTGTGCAGTC 180  
 AGTAAATCC TCCCACTGCN AAA 203

5 SEQ ID NO:6697  
 SEQUENCE LENGTH:51  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07897  
 SEQUENCE DESCRIPTION:  
 10 GATCAAATGA AATAATGTAA CGTGAGNATA CAGTATAAAT GATAAAGGAA A 51

15 SEQ ID NO:6698  
 SEQUENCE LENGTH:65  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07898  
 SEQUENCE DESCRIPTION:  
 20 GATCTCCGGG CAGCCACCAC CTCCTCGGTC TGCCCCNTCA TTA AAAAGTC CTCCTTCCAT 60  
 AGAAA 65

25 SEQ ID NO:6699  
 SEQUENCE LENGTH:59  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07900  
 SEQUENCE DESCRIPTION:  
 30 GATCTAGTGC CTAGTGTTC TTTCTGATG TAATAAAAGG TGGTCTGGCA GAACCTAAA 59

35 SEQ ID NO:6700  
 SEQUENCE LENGTH:129  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07901  
 SEQUENCE DESCRIPTION:  
 40 GATCCAGAGC CACAGAAAGA AATGTAGGTG TGAAGTATTA GGCTGCTGTC AGGGNGAGGA 60  
 TGGCAGATGG AGGCATCAAG CACAAGGAAA ATGCACAACC TATGCCCTNT TATACANNNN 120  
 GTTCATGTN 129

45 SEQ ID NO:6701  
 SEQUENCE LENGTH:39  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07902  
 SEQUENCE DESCRIPTION:  
 50 GATCTTAAGT TTACAATTAA AACTCAGTA CTCAATAAA 39

55 SEQ ID NO:6702  
 SEQUENCE LENGTH:56

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07903

SEQUENCE DESCRIPTION:

GATCCCCCG GGCATGGCCT GGGCTGGTTT TGAATGAAAC GACCTGAACT GTCAAA 56

SEQ ID NO:6703

SEQUENCE LENGTH:31

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07904

SEQUENCE DESCRIPTION:

GATCCTTTTA AAATAAAAAT NTTGATGCAA A 31

SEQ ID NO:6704

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07905

SEQUENCE DESCRIPTION:

GATCAGGAGC CTTCAATAAA ACAGAAATTT TAGGGAAAAC CACAAAAACC TTCGTAAAGT 60

GAATTGCATT AACATCAAT TATAATAAAA TTTCATATTT TGANTAAA 108

SEQ ID NO:6705

SEQUENCE LENGTH:29

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07909

SEQUENCE DESCRIPTION:

GATCAAAAGG GACAAGCATC AAGCACAAA 29

SEQ ID NO:6706

SEQUENCE LENGTH:152

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07911

SEQUENCE DESCRIPTION:

GATCATGGGC AAAATCTAGC CACAGTCCTG AGAGTCCAGG CTTCTGGGAT GCCCAGCTGG 60

GTATAAAAGT CCCTACTAAC CCTGNTTCAA ATTCAGAGGT TTCTTTGGTT NAGAATGCCT 120

CAATGAGATT TTGATACATC CAAGAGCGCA AA 152

SEQ ID NO:6707

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

EP 0 679 716 A1

CLONE:HUMGS07912

SEQUENCE DESCRIPTION:

GATCTAAAAA ATACAAAATG TAGACAATTA CTATTCAGGT GCTTACTTTT AAGCCAATAT 60  
GTAGCAGNGN AAAACTAATT TCTCTGTGGC AGTATTTTAA TTTTGGNAT GTCCCNNGNN 120  
TTAACTGAN 129

SEQ ID NO:6708

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07913

SEQUENCE DESCRIPTION:

GATCCGCACT GGGGGTTCTG CAGGGTGGGG NCAACCACAG CCTGTCACAA GCTCACCGTC 60  
AGCCTCTNTG GNGCCATTGC GCAGCATGAA GTCCCTATCA CCCACATAAT AATGNGNN 118

SEQ ID NO:6709

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07915

SEQUENCE DESCRIPTION:

GATCTTTCCC AGTATCTNNA GTGGGTGACC ACACTTGTC A GTGGGAGNCT NTGAAACTAC 60  
CCTATCGNCT CCTAAGGGC GGGATGAACT GCTTTGTGAC TTGGAAAGGT ACGCTGCTGG 120  
CCAGCATTGG AGANGAAGCT NCTGAGCAN 149

SEQ ID NO:6710

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07916

SEQUENCE DESCRIPTION:

GATCAGGTGG TCAAGGTGCT GCACGATGCC CAGCAGCAGT GCCGAGACGG CCACCCGGTT 60  
GTGGTCAACA TCCTCATTGG GAGGACGGAC TTCCGCGATG GCTCCATTGC TGTATAGGGC 120  
CTTGTTGGGTC AGNACGCTTN GCTGCCCTCC TACCCCTGGA CTGTNTCAA NTGGTTTNG 180  
AGTCTCATNA TTGCTTACCC CTGGNGCTNA TCCCATGAGG NCCCANTGNA CTTCAN 236

SEQ ID NO:6711

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07917

SEQUENCE DESCRIPTION:

GATCCGCAAA GAGGAAGACC GCCTCTTCAT TCTCAGGACC NTCACCTATT GATGGGAATN 60  
TGTGCGGGCT CAGGGTTCTT NNACACACTA GNTGTGGGAA GCCATAGGAG CCTCCAGATG 120  
GGGGCTGGCC TCTCTTGCCC AGCNAGNGGG CAGGGCCTGT GGGNTGGTGA ATN 173

5 SEQ ID NO:6712  
 SEQUENCE LENGTH:48  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07918  
 SEQUENCE DESCRIPTION:  
 GATCACGNCA TGGCACTTCA GCCTGAGCGN CAGAATGAGA CTATTAAA 48

10 SEQ ID NO:6713  
 SEQUENCE LENGTH:50  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS07919  
 SEQUENCE DESCRIPTION:  
 GATCGTGTCA CTGAACCTCA GNCTGGGTAA CAGTGCGACT CTGTCTCAAA 50

20 SEQ ID NO:6714  
 SEQUENCE LENGTH:156  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07920  
 25 SEQUENCE DESCRIPTION:  
 GATCTTTGTT TAAATGCCAA AATGTACTTA AATGAGTTAC TTAGAATGCC ATAAAATTGC 60  
 AGTTTATGT ATGTATATAA TCATGCTCAT GTATATTTAG TTACGTATAA TGCTTTCTGA 120  
 GTGAGTTTAA CTCTTAAATC ATTTGGTTAA ATCAAA 156

30 SEQ ID NO:6715  
 SEQUENCE LENGTH:208  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS07921  
 SEQUENCE DESCRIPTION:  
 GATCGATACC CCCACCCCTC CACTNGCCAG CCTGGGGGTG CCCTGCCTGC CCTCCTGGTA 60  
 CTGTTGTCTT CCCCTCGGCC CNNTCACATG TGTATTCAGC AGCCCTATGG CCTTGGCTNT 120  
 GGGCCTGATG NGNAGGGGTA GAGGGAAGNT GAGCATAGCA CATTTTCCTA GAGCGNGAAT 180  
 40 TGGGGGNAAG CTGTTATTTT NATATTAN 208

45 SEQ ID NO:6716  
 SEQUENCE LENGTH:57  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07922  
 SEQUENCE DESCRIPTION:  
 50 GATCACGACA CTACACTCCA GCCTGGGGGA CCGGGCAAGA CTCTGTCTGT CTTTAAA 57

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15  
SEQ ID NO:6717  
SEQUENCE LENGTH:333  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07923  
SEQUENCE DESCRIPTION:  
GATCTTGAAA AAAAAAGCAA AAGCTTAAAT ATTTGATACA AGTTTACTTA GCTACAACAT 60  
ACTTTACATT GTTGCCCTTA GTTATCTCAC AGGCACTGAC ATTTTATATT TAGAAAATAC 120  
TTTAAATCTT NCTAATCTTT TTTTGTAAT ATTAGTGTCC ATTCTGTATG ACTCGCTAAC 180  
CTACTTTGCA AGGCTTTGGG CAACATTTTA GCTCATTAACT TCAAGATGA TGTGTCATCT 240  
GTATAGGTCA AAGAATGGGN CTTCTGAACT GAGGAATTTT GCTGTTGACA GCCAAAGTNT 300  
AGTGTTACAAG GTTTGATGNA ACTNGNTTAT GTN 333

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25  
SEQ ID NO:6718  
SEQUENCE LENGTH:57  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07925  
SEQUENCE DESCRIPTION:  
GATCTTGAC TTCCAGCCT CCAGAATTGT GAGAAATAAA TTTCTGTTGT TGATAAA 57

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SEQ ID NO:6719  
SEQUENCE LENGTH:63  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07927  
SEQUENCE DESCRIPTION:  
GATCTTTGCT TAATAAGANG AAAAAAGAGG CAAGGAGAAA ACGAAGAGAA AGAAATTTTG 60  
AAA 63

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SEQ ID NO:6720  
SEQUENCE LENGTH:22  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07928  
SEQUENCE DESCRIPTION:  
GATCCNGTGT TCTTCTGTGA AA 22

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55  
SEQ ID NO:6721  
SEQUENCE LENGTH:186  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07932  
SEQUENCE DESCRIPTION:

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5 GATCCGGCTT GGACAGGCAC CTGAGATGGT GCCAAAGTGC AGCTGACTCT TCCCACGACA 60  
GCCCTGCCCT TCCCATGAGG CAGGCTCTTC AGTGAGTGT TGAACGTAAT TATGTAGTTT 120  
TCTGTTTAAT TGAAAAAGNG AGCTATGCCT TTTTTCCTT TTGGANGTAA AGCAGCTAAA 180  
ANCAAA 186

10 SEQ ID NO:6722  
SEQUENCE LENGTH:45  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07933  
SEQUENCE DESCRIPTION:  
15 GATCCAGGTG TTTGTTTCTA ACTTCTGTAA TACATACAAT GCAAA 45

20 SEQ ID NO:6723  
SEQUENCE LENGTH:173  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07934  
SEQUENCE DESCRIPTION:  
GATCATGGTG ATTTNACTGC TGCTTGTTGGN TATCGTGGTT GTTGCACTCT GGCCGACCAA 60  
25 CTGATGGCAG TAAAGAGACC ACCAGCAGTG ACACCTGCCA ATNACAGATG CAAGCCCAAC 120  
ACCCTNTTGG TACGCAAAAC CTNATCTCAA TAAATCCCC CAAAGCTCTG AAA 173

30 SEQ ID NO:6724  
SEQUENCE LENGTH:61  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07935  
SEQUENCE DESCRIPTION:  
35 GATCCAAGC CCTGCATTGT AAGCCACAG TAGGCACTCA ATAAATGCTT GTTAAAGGAA 60  
A 61

40 SEQ ID NO:6725  
SEQUENCE LENGTH:269  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07936  
SEQUENCE DESCRIPTION:  
45 GATCCTGCAG AAGAATAACC TGAATCTGCT CAGAGACCTA AGCTGTGCAC ATTGCCCATA 60  
GCCTCAGGAA CAGTCCAGAC TGGGGCGGTG TGGTCATATT ACACAGNNAG GAGGGTGATT 120  
CAGAGTTCAT GAATATCATT GCCAATNAGA TTGGGTCAGA GGAGACCCCTC CTGTTCTTAA 180  
CTGTGCCCGA TGAGNAAGNT GGTGGNCTNT TTTTACTGGC AGGGCCACNA NCGCTCATGT 240  
GGAGACCCNG GGGCCAGGG TGGCTGATN 269

50 SEQ ID NO:6726

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SEQUENCE LENGTH:229  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 5 CLONE:HUMGS07937  
 SEQUENCE DESCRIPTION:  
 GATCCCTCAT CCCTGAAATT GAGTTTATGT AGTCATTTTA CTTATTTNAT TCATTAGCTA 60  
 ACTTTGTCTA TGTATATTN TAGATATTGA TTAGTGTAAT CGATTATAAA GGATATTAT 120  
 10 CAAATCCAGG GATTGCATTT NGAAATTATA ATTATTTCTT TTGCTGAAGT ATTCATTGTA 180  
 AAACATACAA AATAAACATA TTTNAANACA TTTGCATTTN ACCACCAAA 229

SEQ ID NO:6727  
 SEQUENCE LENGTH:50  
 15 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07938  
 SEQUENCE DESCRIPTION:  
 20 GATCCATGAA CTCTGACCCC TCCCCAGTAA AGGCTTCTGT AGAGAGCAAA 50

SEQ ID NO:6728  
 SEQUENCE LENGTH:122  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS07939  
 SEQUENCE DESCRIPTION:  
 GATCCCCGCA CCAGCCTCTC CTCTCTTTCC CTGCAACCTG TTACCTCACA CAGCTGCTCA 60  
 30 GGAACAGCAG AAATAGTAAA ACTCTTCCAT ATATGTGGCA CCTCAGCCGC CCCTCCNTTA 120  
 AA 122

SEQ ID NO:6729  
 SEQUENCE LENGTH:213  
 35 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07941  
 SEQUENCE DESCRIPTION:  
 GATCAGGAAG TTCTTAGATT CTTGGATGAC AGATGCATGT TGATGCCCTA TGGAGATGTC 60  
 40 CTTNTGTTTT GAGGTCACTG AGGTAGGAAG ACCTGTCTAC TCTTGGTTTC ACCACTAGAA 120  
 CAGTCTTGGG CTGGATGGGT TATAGAGCTG AGCGGCTGTA ATGGTTCTNT TTTTACATTA 180  
 ACAAAAACAA TTA AAAACAC CAAAAACAAC AAA 213

SEQ ID NO:6730  
 SEQUENCE LENGTH:85  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 50 CLONE:HUMGS07942  
 SEQUENCE DESCRIPTION:

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GATCCCAGGN ATTCAAGGTT AGAGTGAGCT ATGATTGCAC CACTGTACTC CAGCCTGGGC 60  
 ANCAGAGANN GACCTGTCTC ACAA 85

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SEQ ID NO:6731  
 SEQUENCE LENGTH:313  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS07944

SEQUENCE DESCRIPTION:

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GATCCAGCTG GAATTTGAGG ACACTGGAAC AATGAGGTCA GCTTCCAAAA CAAAACAAAA 60  
 CAAAACTTTA AACATCTGTG TAAGTACAGG GTGGAATATA ATGAATTCCA GGTACCCATC 120  
 ACTTAGGTTC CACAATTAGC CATGGCCAAT CTTGTGTGAT AGGTATGTCC CTACCTATTT 180  
 CTCCCCTGCC CTNATTGTGA AGTAAATATT TTCCTAAAAG GTCTTTTAA AATTAAGTTA 240  
 TAACCATGCC ATCATGTAC AAANNTAATG CTATTANNTT CTTANTNTN ATCAAATNTT 300  
 CNNGNCTNAN NTN 313

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SEQ ID NO:6732  
 SEQUENCE LENGTH:73  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

25

CLONE:HUMGS07945

SEQUENCE DESCRIPTION:

GATCACTTGA ACCTAAGAGT TTGAGGCTGC GCACTGCACT CTGGCCTGAC AGAGCGAGTC 60  
 ACTGTCTCTT AAA 73

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SEQ ID NO:6733  
 SEQUENCE LENGTH:257  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS07946

SEQUENCE DESCRIPTION:

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GATCTGAATT CTAATGCTGG CTTGTGCCTC TAACTATGTG GTTTGGTCAT TATAGATAAT 60  
 GCCCAGTTTA ANTTTCCCA TCTTTGAAAA GGAGATAATA TGTNATCTCT TGGGAGTAGT 120  
 TCTGAATATG AAGTGTGTTG ATACAAGAAG CACTGACAAT GTTCTGTNN NNNAAATTTA 180  
 AAACCTGGCCT GGTTTGCCTT TTTAATCAAG NGNGCTTAAC AGGTAAAAAN TTGAATTAG 240  
 NCCTAAAAAN AAAAACN 257

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SEQ ID NO:6734  
 SEQUENCE LENGTH:148  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS07948

SEQUENCE DESCRIPTION:

GATCCTTTAG CCTCCTGGNA GTGCCCCAGT TGTACCCCTT ACACACCCCT CTTGGCATTG 60  
 AGTGCCAGTC CTCTGCCAGG CTNTGTGTTA CAAGTTGGGG NGGGCGGCAA AGTACCGAAT 120

55

TAAAGATGTC AGTCTAAAG GAGGNAAA

148

SEQ ID NO:6735

SEQUENCE LENGTH:289

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07949

SEQUENCE DESCRIPTION:

GATCATATCC AATTCATATG GAAGTCCCGG GTNTGTCTTC CTTATCATCG GGGTGGCAGC 60  
 TGGTTCTCAA TGTGCCAGCA GGGCCTCAGT ACCTGAGCCT NAATCAAGCC TTATCCACCA 120  
 AATACACAGG GAAGGGTGAT GCAGGGAAGG GTGACATCAG GAGTCAGGGC ATGGNNTNGN 180  
 NAGATGANTA CTTTGCTGGA TGAAGCAGGC TGCAGGGCAT TCCAGCCAAG GGCACAGCAG 240  
 GGGACAGTGC CGGGAGGTNT NGGGTAAGGG AGGGCAGTNA CNTNAGAAA 289

SEQ ID NO:6736

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07951

SEQUENCE DESCRIPTION:

GATCAGGCTT TTAATACTC ATTTACAAGT TTTCTATCCT CTTTCAGTGT TAAAGTAGAA 60  
 AGTAAAAAGA GTATCTNATA CATGCATGAA ATTAAGCAT ATACCAATG CAAA 114

SEQ ID NO:6737

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07952

SEQUENCE DESCRIPTION:

GATCACCCAG CATCCTTCCC CACCCAGCT GTGTATTTAT ATAGATGGAA ATATACTTTA 60  
 TATTTTGTAT CATCGTGCCT ATAGCCGCTG CCACCGTGTA TAAATCCTGG TGTATGCTCC 120  
 TTATCCTGGA CATGAATGTA TTGTACACTG ACGCGTNCCC ACTCCTGTAC AGCTGCTTTG 180  
 TTTCTTTGCA ATGCATTGTA TGGCTTTATA AATGATAAAG TTAAAGAAA 229

SEQ ID NO:6738

SEQUENCE LENGTH:295

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07953

SEQUENCE DESCRIPTION:

GATCTCTTGT NCTTTAATTT TAGGGTCTTG TTCCAGGACT CAAATCAGTA ACTTGGTGAT 60  
 TACAAGGTGC TGAATGTGTT GGTAAACATA TCGCAATACA CCTCAAGGAA AAGGTTTCAGA 120  
 TTTNATTTT TAAATATTT NCATTTTTC CTTGAATTN ATATCCGTTT GTCCACTCGT 180  
 ACATGCCTAG CCTACAGAAG GGGATATATA TNATGANATG GTCATTTTCC TGAAGNGNAT 240  
 ATTTTGCTTG AAATGCAAAG GNCTGAAAGN GNTTTGTAGG TTGTTGGTTT TTTCN 295

SEQ ID NO:6739

SEQUENCE LENGTH:85

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07954

SEQUENCE DESCRIPTION:

GATCATAACA CTACTCCAGT CTGGGTGATG AAGTGAGACC TGTCTACAAA AAAAAGAAGC 60  
CCAAACTAAA CCTAAGCAA GCAAA 85

SEQ ID NO:6740

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07955

SEQUENCE DESCRIPTION:

GATCAGGCTG GTCTCAAACT CCTCGGTTCA AGCAATTGCG CCACCTTGGC CTCCCAAAGT 60  
GCTGGGATTA CAGGGGAGCC ACTGCACTGG CCTTCATTGT CTTTTTGCTG CACAACCTAA 120  
AAAACCAAGT ACCCTGTATT GGAAA 145

SEQ ID NO:6741

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07956

SEQUENCE DESCRIPTION:

GATCCTAACA TGTATTGATT GTAAAAGTGA AATATGTAAT AGCCACACTT CACTGTTTTA 60  
AAATAAAAGT GCAATTTCAA A 81

SEQ ID NO:6742

SEQUENCE LENGTH:50

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07957

SEQUENCE DESCRIPTION:

GATCTTGTCT CCAATTAAAC CGAGGCTTTC ACCGATAAAA AAAAAACAAA 50

SEQ ID NO:6743

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07958

SEQUENCE DESCRIPTION:

GATCTGATGA AGTATATNTT TAATTGCCAT TTTGTCCTTT GATTATATTG GGAAGTTGAC 60  
TAAACTTGAA AAATGTTTTT AAAACTGTGA ATAAATGGAA GCTACTTTNA CTAAA 115

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5 SEQ ID NO:6744  
 SEQUENCE LENGTH:175  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07959  
 SEQUENCE DESCRIPTION:  
 GATCGGGCTA CTACAAAGTT CTGGGAAAGG GAAAGCTCCC AAAGCAGCCT GTCATCGTGA 60  
 10 AGGCCAAATT CTTACAGAGA NGAGCTGNGG AGAGATTAAG AGTGTGGGG GGGCCTGTGT 120  
 CTTGGTGGGT TTAAGGCNCA TTGGNGGNA NTTCAATTNAA TTNTACTTC TTTN 175

15 SEQ ID NO:6745  
 SEQUENCE LENGTH:61  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07960  
 SEQUENCE DESCRIPTION:  
 20 GATCAAAAGT AACACGTNNA GACTCTGAGC TTAATCCATT AAATGGATTT NAGCATCTAA 60  
 A 61

25 SEQ ID NO:6746  
 SEQUENCE LENGTH:118  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07961  
 SEQUENCE DESCRIPTION:  
 30 GATCATNAAC TACTACTGGTT ATNTGGAAGT CTAGGTTCTG GTCCTGCTAC CCCTTTAACT 60  
 TGAGTNATTT ACAAGTCTGT TTAAGGTTT CTAGACATAC ACTGGTTTGN TTTTAA 118

35 SEQ ID NO:6747  
 SEQUENCE LENGTH:140  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07963  
 SEQUENCE DESCRIPTION:  
 40 GATCGCCCAA CGTTTTTGGN TTATAGAATT ATTATTCCT GCTTCTTTC TTTGGGTCTT 60  
 TTGAATTCT TTGGTTTCGT NTTAAGAAG TAACCCANCA TTCTCTACAA CACTAAATAA 120  
 AATGGTACTT ACCTTTCAAA 140

45 SEQ ID NO:6748  
 SEQUENCE LENGTH:68  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07964  
 SEQUENCE DESCRIPTION:

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GATCCCCGTT CCACCCCAAG AGAACTNGCG CTCAGTAAAC GGGAACATGC CCACTGCAGA 60  
CACGTAAA 68

5 SEQ ID NO:6749  
SEQUENCE LENGTH:79  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07965

10 SEQUENCE DESCRIPTION:  
GATCCCCCT GCCTATCAGC TTCTCCTGTG GNGCCTGTTC CTCACTGGAA ATTGGCCTCT 60  
GTGTGTGTGT GTGTGTGTN 79

15 SEQ ID NO:6750  
SEQUENCE LENGTH:28  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07966

20 SEQUENCE DESCRIPTION:  
GATCGAAAGG GAGGCAGGTT TGCCTAAA 28

SEQ ID NO:6751  
SEQUENCE LENGTH:294  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07967

30 SEQUENCE DESCRIPTION:  
GATCTCAAGC CAGCCCNCTC CAGCTCATGA CACTGTTTGG CCTTTCTTGG GGAGAAGGCG 60  
GGGTATTCCC ACTCACCAGC CCTGGCTGTC CCATGGGGAA ACCCTGGAGC CATCCCTTNG 120  
GAGCCAACAA GACCGCCCCA GGGCTATAGC AGTAAGAACT TTAAAGCTCA GGAGGGTGAC 180  
GNCCAGATNC GNCTGCTGGG AAGAGCTCCC CTNCACAGCT GCAGCTGAAT GCATTAGGGC 240  
35 TACCGNAGGN CCCGGACTTA NCAAACTTGG NCNACAANNG TTCCTAGGGN TTN 294

SEQ ID NO:6752  
SEQUENCE LENGTH:160  
SEQUENCE TYPE:nucleic acid  
40 TOPOLOGY:linear  
CLONE:HUMGS07969

SEQUENCE DESCRIPTION:  
GATCCCAAG TGTGAACAGT CTGAAAAGGG CTTTTTGCTT GCTGCAGGGA CCTGAGAATT 60  
45 GAGAAACAGC TGTGAAACTT TGAACCTGG CTGGAAGGTC CTGGTATTGA CTGTGGCANG 120  
AAAACGGGGG AGCTAATCTG TAATCTGCTT AGACGCCAAA 160

SEQ ID NO:6753  
SEQUENCE LENGTH:98  
50 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear  
 CLONE:HUMGS07971  
 SEQUENCE DESCRIPTION:  
 5 GATCAGATTC ACGGACCCAG AGCTTTTCCA TGTGTTTATA TTGTAAATAT TTTTNATTTC 60  
 ATCAAATTAT TTATTCATTA AAAGAAATTT TTGTGAAA 98

SEQ ID NO:6754  
 SEQUENCE LENGTH:35  
 10 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07973  
 SEQUENCE DESCRIPTION:  
 15 GATCCTGTCT CTTAGGAAAA AAGAAAACCT CTAAA 35

SEQ ID NO:6755  
 SEQUENCE LENGTH:64  
 20 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07974  
 SEQUENCE DESCRIPTION:  
 25 GATCAAAGAC CTTGCCTCTA TTTNACCCCG CACTGACTGA ATAAAGCTCC TCTGGCCGTT 60  
 NAAA 64

SEQ ID NO:6756  
 SEQUENCE LENGTH:38  
 30 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07975  
 SEQUENCE DESCRIPTION:  
 35 GATCATCTGA GCTGAAGAAA TAAAAAACA CACACAAA 38

SEQ ID NO:6757  
 SEQUENCE LENGTH:56  
 SEQUENCE TYPE:nucleic acid  
 40 TOPOLOGY:linear  
 CLONE:HUMGS07976  
 SEQUENCE DESCRIPTION:  
 GATCATTCAT AACTATATT TATTTTNC A TAAANTATT TAAACCTT TGGAAA 56

SEQ ID NO:6758  
 SEQUENCE LENGTH:105  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS07977  
 SEQUENCE DESCRIPTION:  
 50  
 55

# EP 0 679 716 A1

GATCTTTCAT CAAGATTTTA CCTGCATTTA TGTCTAAGGG TCCCTGATAA GGCTTGAGGC 60  
ATGTAACCTA TGTCTAATTA AAAATGATTT GTTGAATGAA NCAAA 105

5 SEQ ID NO:6759  
SEQUENCE LENGTH:65  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07981

10 SEQUENCE DESCRIPTION:  
GATCTACAGA AGCTTTNATT CTCTTACCTT AACAGTAGTA ATAAAGTTAA CATTNTCACA 60  
TCAAA 65

15 SEQ ID NO:6760  
SEQUENCE LENGTH:106  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07986

20 SEQUENCE DESCRIPTION:  
GATCTGTGTG TTGTGGGAAG AGAATTTTCA ATATGTAAC ACAGGAGCTGT AGTGCCATTA 60  
GAAACTGTGA ATTTCCACAT AAATCTGAAC ACTTGTCTTT ATTAAA 106

25 SEQ ID NO:6761  
SEQUENCE LENGTH:106  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07987

30 SEQUENCE DESCRIPTION:  
GATCTCATGG CTTTGATTGN TTTGGGCTGT TCAAAATGTT TATTTGNAAA ACGTATACAT 60  
TAATAAACTT AACAAAGCGN TATAAAATAC AGCGNAATCA CCCAAA 106

35 SEQ ID NO:6762  
SEQUENCE LENGTH:335  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS07988

40 SEQUENCE DESCRIPTION:  
GATCGAAAGG GCCACCATGA ACTTGATACG TCCGTGTGTC CCAGATGCTN NCATTAGTCT 60  
ATATGGTTCT CCAAGAACT GAATGAATCC ATTGGAGAAG CGGTGGATAA CTAGCCAGAC 120  
AAAAATTTGAG ANTACATAAA CAACGCATTG CCACGGAAAC ATACAGAGGN TGCCTTTTCT 180  
45 GTGATTGGGT GGGATTTTTT CCCTNTTTTAT GTGGGATATA GTAGTTACTT GTGCCAAGAN 240  
TAATTTTGGC ATNATTTCTN TTANTATCAA CTCTGANGCT AACTTGTACT AATCTGAGAT 300  
TGTGTTGNT CCNANTAANC GTGANGTGAA CCTGN 335

50 SEQ ID NO:6763  
SEQUENCE LENGTH:169

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07989

SEQUENCE DESCRIPTION:

GATCTTGGAG ACAGGCCATC CATCCTGGAG CCTCATGGAA CAGGATGATG GCACTGAGAA 60  
AGCCAATGAC CGAATCTCTT TTCTCTGTAA AAATGTAGAC TGAAGGCCA TGTGTATTTT 120  
CCTATGTGCT GTAGCTCTCC TTTGGAAATA AATCACAGGC ATCTGGAAA 169

SEQ ID NO:6764

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07990

SEQUENCE DESCRIPTION:

GATCTGGGCT GCAGGAGCTG GGGCCACCCA CAGCCCCCCT ACCGACCTGG TGTGGAAGGC 60  
ACAGAACACC TGGGGCTGCG GGAACAGCCT GCGTACGGCT CTCATCAAAAC TCACTGGGGA 120  
AGAAGTGGCC ATGCGGAANT GGTGCGCTCA GTGACTTNTG GTTNAGGACG NCGNGGNTTG 180  
AGGATTGAGA NTACCNATTT CATTNACCAC NN 212

SEQ ID NO:6765

SEQUENCE LENGTH:141

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07991

SEQUENCE DESCRIPTION:

GATCATACCA CTGCACTCCA GCCTGGGCGA CAGAGAACCT CTCTAAAAAA AAAGGAAAAAT 60  
NAAAAATAAA TGGGGGCAGA AGCTGAGCCA AGCAGAGGCG GGCAGCTCCT CCTCCAGGGC 120  
CCACCTGGCC TGCTGGGGAA A 141

SEQ ID NO:6766

SEQUENCE LENGTH:360

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07992

SEQUENCE DESCRIPTION:

GATCTGTTAT NAAACGAAAC ACCCCCCGTG TTAATAACTT GGTATGAAAT CTGTTTTTAT 60  
GAGCCGGGCC CCCTGTGCCT CTAGTATACT TGTATTGACT CTCATAGTTA CCCTTTTAGT 120  
TTTACTGTGT TCTGTGAAAA TTTGTAATTG GTTGNGAATC ACTGTGGGCG TCCATTCTTA 180  
TTCAACTAAA TCTCCACAGG TTTTTGAGC TGGTGTGGAT TAGTTTAACT CTTGTATTCA 240  
ACCATTAGTG CTACCACCTT CTCACATTAC AATACANTTN CTGGAAGCAA GTACTGCATT 300  
TCCTATGCAA CAAAAAAGG GCAAAANTAC ANANATTGCT AAATGATAAA CAAANACTTN 360

SEQ ID NO:6767

SEQUENCE LENGTH:88

SEQUENCE TYPE:nucleic acid

# EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS07994

SEQUENCE DESCRIPTION:

5 GATCAAAAGG GCTATGGGAA GGGCAGACCC CGCCAATGAT TTCTCTTCAC CTGTCTTAAG 60  
ATTAAATAAA AAAGAGTGTC CTGGCAAA 88

SEQ ID NO:6768

SEQUENCE LENGTH:65

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07995

SEQUENCE DESCRIPTION:

15 GATCTTGCCA AGAACCATCA CGTGTTAATT TAGTTGCTTA AACAAAAGGT GTTCTGTTTC 60  
TTAAA 65

SEQ ID NO:6769

SEQUENCE LENGTH:246

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07997

SEQUENCE DESCRIPTION:

25 GATCAGTGGT GAAATATAGT GATTTTNACC TGTGCTTCCA TTCTGAAGTT CTGGAAAGAA 60  
GTACTGGATG GACTGAAGTC CAGGACAACG TTCCAAAGAA AGGCAGAGTC CAGGTAGGCT 120  
TGGAGGACCA AGCCCTGGAT GAGCACTGGA GGGCAGAGGC CTCAGTGTCC AGCACTGTGC 180  
CCTGCACATG GAAAGCCCCT ACGTTTGTGG AATNAATGAN TANTAATAAT ATTTTNATNA 240  
GTGAAA 246

30

SEQ ID NO:6770

SEQUENCE LENGTH:23

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35

CLONE:HUMGS07998

SEQUENCE DESCRIPTION:

GATCCTGTCC CTGCCCTGCC AAA 23

40

SEQ ID NO:6771

SEQUENCE LENGTH:46

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS07999

45

SEQUENCE DESCRIPTION:

GATCTGTATA TCCTCCAGTC CAAGATTAAA GAGGCGGACT GTGAAA 46

50

SEQ ID NO:6772

SEQUENCE LENGTH:108

55

EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 5 CLONE:HUMGS08000  
 SEQUENCE DESCRIPTION:  
 GATCCAACT CATTCTTCT GTAACCTCAT GATGACGTAT AACNNTTCC ACCTCACTNG 60  
 GAGGTTGGNT CTNCATTCTG AAGGCTTCTA TGTATACATA TTAAATAN 108

10 SEQ ID NO:6773  
 SEQUENCE LENGTH:218  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS08001  
 SEQUENCE DESCRIPTION:  
 GATCAACGAC GACCTTTTTC CTTTNNATAC TAAAGTAAGA AATAAGAATG TNAGCCCAAA 60  
 CTGCACTATT TTGCAGACCC CTACCATTTT ACAAACTGGT CAGAGTGGAA AATTCCACCA 120  
 GGGCCTGAGC TGTGAGAAAC ATCCTGTGAG GCAGGNCCCA GGNCTNAACC CCTGGCTGCA 180  
 20 CTAANTTCT TCATNATCAN CAGCCTAACA NACCGTCN 218

SEQ ID NO:6774  
 SEQUENCE LENGTH:38  
 25 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08002  
 SEQUENCE DESCRIPTION:  
 GATCAACAGT GCAGAGAATC TAGCAAGTAT AAAAGAAA 38

30 SEQ ID NO:6775  
 SEQUENCE LENGTH:252  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS08003  
 SEQUENCE DESCRIPTION:  
 GATCTGCAAC ATGAANCCCG AGGCATGGGT TGGTGTGATG CCAAGGCAAA GTGGTGAGGA 60  
 GAAAACAGGA AACGGNCTTT CTCTGAATTG GTAAATGGGA AAGAAGTGAG CAACTTAAGA 120  
 40 TTGTCACANT TAATCACAAG TGTACAGGAT TAGACTGGGT TTATATTAA CTCTTGCTTC 180  
 ATAGGTGTAC CATTTAAAGN GTGTTATNTA NTGCTAAGAA NTAAGTGCTT TNATAAAGCT 240  
 TATTNNNNAA TN 252

SEQ ID NO:6776  
 45 SEQUENCE LENGTH:34  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08004  
 SEQUENCE DESCRIPTION:  
 50 GATCAAAGGG AATAAAGAGA ACTCTTGGCT GAAA 34

55

# EP 0 679 716 A1

SEQ ID NO:6777

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08005

SEQUENCE DESCRIPTION:

GATCATATNC TTTTTCTNTT TTGTTCTTA CAATATCAAT CTAATTTAAT ATTCTCTTGT 60  
GAGAACACAA ACATNNGTAA ATTGCTCAGT AGTGGCAGCA GTAAGGN 107

SEQ ID NO:6778

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08006

SEQUENCE DESCRIPTION:

GATCAAGGTT TGTNTGCCCA TTACCTTTCC TCTGCCTGAA AGACGTGTCT CAAGAAAAAT 60  
AAATTCTATT TNAGATGCAG GTACTNATAN TAATTCTAAG ANTTGATATC AN 112

SEQ ID NO:6779

SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08007

SEQUENCE DESCRIPTION:

GATCAGAGNA AACGNCTTTA ACNCCACCAT TAGCACCCAA AGCTAAGATT CTAATTTAAA 60  
CTATTCTCTG TTCTTTTCATG GGGAAGCAGA TTTGGGTACC ACCCAAGTAT TGACTCACCC 120  
ATCAACAACC GCTATGTAAA 140

SEQ ID NO:6780

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08008

SEQUENCE DESCRIPTION:

GATCAATCTC ATATTCATTC CCTGGGATGT TTAGTTACCA GTTTTCCCAA AGTGTTCCTGG 60  
TAGCATCTAC CATATTTNAT CAAATCTGTG ATTCCTTTGA TTATNATATG AACCATTATT 120  
TTATGTATCA TTAAGAAAAA ATACTGCCAA TAAACTCTG TCATGNNAAC AAA 173

SEQ ID NO:6781

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08009

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCCAAGTT GAGATTTTAA TTCTGTGACA TTTTACAAG GGTAAGATGT TACCACTACT 60  
TTAATTATTG TTATACACAG CTTTATGATA TCAAAGACTC ATTGCTTAAT TCTAAGACTT 120  
TTGAATTTTC ATTTTAAAA AAGATGTACA AACAGTNTT GNAATAAATT TNAATTCGNA 180  
TATAAA 186

10 SEQ ID NO:6782  
SEQUENCE LENGTH:102  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08010  
SEQUENCE DESCRIPTION:  
15 GATCCATTTT TNATATGTCT TGAAGTACTG TGTCTAGTGG GCAAATGTCA TTGTTACCTC 60  
TGTGTGTAA GAAATAAAAA ATATTNCTA AAGGTCTGTA AA 102

20 SEQ ID NO:6783  
SEQUENCE LENGTH:198  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08011  
SEQUENCE DESCRIPTION:  
25 GATCAAGTAG ATTTTAAAA AATCAGAGTC AATTAATTTT AATTGAAAAT TTCTCTTATG 60  
TTCCAAGTGT ACAAGAGTAA GATTATGCTC AATATTCCCA GAATAGTTTT CAATGTATTA 120  
ATGAAGTGAT TAATTGGCTC CATATTAGA CTAATAAAAC ATTAAGAATC TTCCATAATT 180  
GTTTCCACAA AACTAAA 198

30 SEQ ID NO:6784  
SEQUENCE LENGTH:278  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08012  
35 SEQUENCE DESCRIPTION:  
GATCAGAGTA AACNTGGAG CTAGATTGAT TACAGAGTGC AAGGACTAGG CACCCCGGGA 60  
TTGGAGAGCA TCCTTGAAG CAAGGGTTCT TCATTATTT ATAAAAATTT NATTCCTAC 120  
TAGAAGCCCA GCTAAGAGTA TGAAGCAATT AAGACAACAN TCTTTGCTCA AGAATCTCCT 180  
AGACAATCCT GATTCAAGCA CCAGAAACAA AGGGNNAAGA AACCTCCCAG TCTNGTGNG 240  
40 NAAGTNGTAC ACATCNTGTC AACAGNTAGG TTNTTTN 278

45 SEQ ID NO:6785  
SEQUENCE LENGTH:339  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08013  
SEQUENCE DESCRIPTION:  
50 GATCCCATGT NAGCTACACA GTGCAGAGGC TCTTGATGGT GGAATAAGCA ATTCCTCCC 60  
TCGTGCGCAT CTCAGAACCC ATCGGTAGGC AAAGGAAAAAT ACGCTCAGGT GGTGTGNGN 120

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EP 0 679 716 A1

5 MAGNCTGTNT CAGGCCTACG GAGTCAGCCA GTGGCTAGCG CAAGACCAGT CACTCCCTCT 180  
GCNTTCAGGC TTCTTTCAAT TTCATTATCA TCAAGCAGGA ATTATGTCGT AAGTCACTGA 240  
CCCTAACTGC AGACCATGAA GTAAATTATG TAACTAGGTT TTTNNCTTCT CCAGTGGTGA 300  
CCACCNNCNC NCATNCCCCG GTNANAACCT GGGTTTTTN 339

SEQ ID NO:6786  
SEQUENCE LENGTH:80  
10 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08014  
SEQUENCE DESCRIPTION:  
GATCGCCTAT TACTGACAGT CTCATTGTAG CTCTAAAAAG CCTAATGTAT CCACTGTGGA 60  
15 ATAAACTCCA TAGACTCAAA 80

SEQ ID NO:6787  
SEQUENCE LENGTH:279  
20 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08015  
SEQUENCE DESCRIPTION:  
GATCTTGAAG AGACCGCTGG CAGCACCAGT ATTCCTCAAGA GGAAGAAGTC TACACCCAAG 60  
25 GAGGAAACAG TTAATGACCC TGAGGAGGCA GGCCACAGAA GTGGCTCAA GAAAAAGAGG 120  
AAATTNTCCA AAGAGGAGCC GGTGAGCAGT GGGCCTNNAG AGGCGGCTNG CAAGAGCAGC 180  
TCCAAGAAGG NAGGAAAAAG TTCCNTTAAG CATTNCCNGG GAGNTTGAAT TCAAAATTG 240  
GGCATTNTTN TTTGGGGGTT GGGNNATTCC CTGGCCCN 279

30 SEQ ID NO:6788  
SEQUENCE LENGTH:192  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
35 CLONE:HUMGS08016  
SEQUENCE DESCRIPTION:  
GATCCACTCA CCTCGGCTC CCAAAGTGCT GGGATTACAG TGCCCGTCCG TGATGATGGG 60  
AACATGNCCG ACGTGCCAG NCACCCAG GACCCTCAGG GCCCCAGNCT GGAGTGGCTG 120  
AAGAACTGT GAGCACCTCC ACTGACAGAG GCGGCCCTC CCACGGCTCC CAATAAAAT 180  
40 GTGAAAACCA AA 192

SEQ ID NO:6789  
SEQUENCE LENGTH:303  
45 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08017  
SEQUENCE DESCRIPTION:  
GATCCGTATC GNTTTAAGAA GCGGACGGAG CTGTTTATTG CCGNCGAGGG CATTACACG 60  
50 GGCCAGTTTG TGTATTGCGG CAAGAAGGCC CAGCTCAACA TTGGCAATGT GTCCTCTGTG 120

55



5 GGCACCATGC CTGAGGGTAC AATCGTGTGC TGCCTNGAGG AGAAGCCTGG AGACCGTGGC 180  
 AAGCTGGCCC GGGCATCANG GGAATATGCC ACCGTTATCT CCCACAACCC TTNGACCAAG 240  
 AAGNCCCGTT TTGAANGTTG CCCTNCGGTT TCCAAAGAAN GTTTATCTCC TTAANGCCAA 300  
 TCN 303

10 SEQ ID NO:6790  
 SEQUENCE LENGTH:267  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08018  
 SEQUENCE DESCRIPTION:  
 15 GATCTAAAAA TCAATGAGAA CATAATTTTA ATTGGCAGTT CTTCAGAAAA ATGTGAATGG 60  
 CTTATAAACA TAAATGTAAT ACTCAGCTGC TGTCATCATC AGAAGAATGA AGTTGTTTTT 120  
 AAGCTCTTCA NCTGTCAAGN GTAAGAAGCA ATGTTACTAA TACCGGCAAG NIATGAAAAG 180  
 ACGCTCATAC ATTGTTGGAA ATNAANGTTG GTATNGCTTT TCAGCGGCCN ATNAACATAA 240  
 TCCCNNTNTT TCTCCCTAC NNACTCN 267

20 SEQ ID NO:6791  
 SEQUENCE LENGTH:189  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS08019  
 SEQUENCE DESCRIPTION:  
 GATCATCTGG CAAGACAGCC CAAGAATAAA GCCGTCACCA TGGAGACTAA GAAGNGNCAG 60  
 AAAGNCACTG GGTCTTCATT GTNTCGTCCA GCTGTTTCATG AGGCCTTATC TGAAGCCAC 120  
 GTGACCTCCG GNCTACTCAC TTACATGCGN GAATAAAAGC TCTATTTTGT TTTAGGNCCN 180  
 30 AAATAANTN 189

35 SEQ ID NO:6792  
 SEQUENCE LENGTH:129  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08020  
 SEQUENCE DESCRIPTION:  
 40 GATCTGCTGG CAGAGGNCAA TCAAAAACGA CAACAAGCTT CTTCCCAGGG TGAGGGGAAA 60  
 CACTTAAGGA ATAAATATGG NGCTGGGGTT TAACACTAAA AACTAGAAAT AACATCTCA 120  
 AACAGTAAA 129

45 SEQ ID NO:6793  
 SEQUENCE LENGTH:267  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08021  
 SEQUENCE DESCRIPTION:  
 50 GATCAGGACC CACCTCCAGT TCTNCTGAAA GTNTGACAGT GTCCAGCCGG TTCTGCAGCA 60

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5 CTAGGGGAGG GGGCAGATGG TGGTTGCATG GGCTTCCTGG GTCTCCACTC TCCGTCTGGC 120  
CTAAAGGTGA TGTATTGGT GTTTGGNCCT GCAGTCCCCA CTNTTAAGGC TTAAGCGGGA 180  
TGTGGAACAN CACTTTCCTT CAGGAGTAGG TNGNTNTACT TGTACCTCAT TTAGGGCTTA 240  
GAAAGTTTNN CCNCANACTN NAAAAAN 267

10 SEQ ID NO:6794  
SEQUENCE LENGTH:122  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08022  
SEQUENCE DESCRIPTION:  
15 GATCTACAAA ACAGATAGNG NAAAGTACAA CAGAATAGCT CGGGAATGGN CTCAGAAGTA 60  
TGCAGATGTA TTAAGAAAT TATTGGATAA CCTCTACAAA TAAAGATAGG GGNACTCTGA 120  
AA 122

20 SEQ ID NO:6795  
SEQUENCE LENGTH:56  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08023  
SEQUENCE DESCRIPTION:  
25 GATCCCACTT GTAGATGCTT GCACTCACAC AATAAAAAAG TCTGNTATTT GCCAAA 56

30 SEQ ID NO:6796  
SEQUENCE LENGTH:130  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08024  
SEQUENCE DESCRIPTION:  
35 GATCCGTGGT TCCCTGCAGA CTGGCAGGAG CAGATTCCAA AGGCACAGGA AGAAGCTTGC 60  
AGGTAGAATG TGTTCAATAC CTCTGCGCA TTATACCACA AAAAAGCTGG GNATAAAAAT 120  
GCTAACCAAA 130

40 SEQ ID NO:6797  
SEQUENCE LENGTH:234  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08025  
SEQUENCE DESCRIPTION:  
45 GATCTGCCCC ATGATTGGTT CCTTAGGANC AAGNAATTTA CAAGTAGNAA TTATTCCTTT 60  
CAGAGTAACA TGCTGTATTA CTTCAATCCC TATTTTGTG TGTCCATTT TCTTTGGATT 120  
CCCTATTCAC ATTGAATCCT NTTTGCCCTT CTGAAACAAT ATTCAGTCAC AAGNGNTTTT 180  
GGTCATGTTG GTCTTTGTAA CAAATNAAAN TTACCTTATA TCCTTCTGGA CAAA 234

50 SEQ ID NO:6798

55

EP 0 679 716 A1

SEQUENCE LENGTH:246

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08026

SEQUENCE DESCRIPTION:

GATCACAAGG TCAGGAGTTC GAGACCAGCC TGGCCAATAT GGTGAACCTC ATCTCTATTG 60  
 AAAATACAAA AATCAGCCAG GCACGGTGGC AGGCGCCTGT AGTCCACCTA CTCGGGAGGC 120  
 TGAGGCAGGA GAACTGCTTG AACCCAGCGG CAGAGGTTGC AGTGAGCCAA GATTGAGCCA 180  
 CTGCACTCCA GCCTGGTGNT AGNGCGNGCT CTGTCTCTAA ATAATNANNT AAANTNCNTT 240  
 AANNNN 246

SEQ ID NO:6799

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08027

SEQUENCE DESCRIPTION:

GATCAGTGT AAAC TAGATT GTATTCATTA CTAGATAAAA TGTATAAAGC TCTCTGTACT 60  
 AAGGNGAAAT GACTTTTATA ACATTTTGAG NAAATAATAA AGCATTATC TAAA 114

SEQ ID NO:6800

SEQUENCE LENGTH:274

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08028

SEQUENCE DESCRIPTION:

GATCTTTTGT GCCAAGATGC AGGGAAATNA AGAAAGCTCT TTCCAGCTGT TTTNATGGAT 60  
 TCATGGAGTG GGCTCATGTT GGGACCAGCT GACTCTGGGN GGAAGACTGC CTCTCCATCG 120  
 CTGTGAGAGA GCCTGAAAGG ACCAACAATG AGNTGTTCTT GGGACCCGCC ATGGGGATGA 180  
 TTGCTTCTCT AGGCTNCTGG CTGTTGCTGC ATTCTAAGGN TTAACCTCCT GGTCTNATGG 240  
 TAGTGANCTT GAGCTTTTNN ATTCNATAGN AGNN 274

SEQ ID NO:6801

SEQUENCE LENGTH:42

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08029

SEQUENCE DESCRIPTION:

GATCTGTGNA GNAATGAAAT AAAATGGAGA AGAAGACAGA AA 42

SEQ ID NO:6802

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08030

## SEQUENCE DESCRIPTION:

GATCCAGTTT CAAGAATGGG CAGGTAAACG CAGNANGAGG AAAGGAATGT GGAATGAGAA 60  
 CTTGGTGGTT CACCGCTGTA CTATTTGTGT AAATGTTTAC GTATGTNATA AGCTACATGT 120  
 ATGTAAATNT TGCAATACCC CTAACAGTCG AGTAGTAGTC TCCCTTACAG GAATTTTGA 180  
 CGGGGTTTCT CATCATCAAT ACCAAATAAN TATATGTAGG NNTGAAA 228

SEQ ID NO:6803

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08031

## SEQUENCE DESCRIPTION:

GATCATATTC TTGAAATTTT TATAAATATG TATGGAAATT CTTAGGCTTT TTTTACCAGC 60  
 TTTGTTTACA GACCCAAATG TAAATATTAA AAATAAATAT TTGCAATTTT CTACAGAATT 120  
 GAATACCTGT TAAAGGAAAA TTACAGAATA ANCTTGTGAC TGGTCTTGTT TTACATTAAA 180

SEQ ID NO:6804

SEQUENCE LENGTH:277

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08032

## SEQUENCE DESCRIPTION:

GATCATTCCG AGGTCAATTG AGGACGCACA CTGGAGAGAA GCCTTATNAG TGTAAACAAT 60  
 NTGGAAAAAC CTTCACTTGG TNCCTAACGT TTAGAGAACA TGTNAGAATT CACACGCAAG 120  
 AGCAGCTCCA TAAATGTGAA CACTGTGGGA AGGCCTTTAC CTCTCCAGA GCATTCCAAG 180  
 GTCATTGAG GATGCACACT GGAGAGAAGC CTTATGAGTG TACACAATGT GGANAAACCT 240  
 TCACTNGGGG CCTCAANCCT TACNTAATAA TGTGGTN 277

SEQ ID NO:6805

SEQUENCE LENGTH:273

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08033

## SEQUENCE DESCRIPTION:

GATCTACCTC AGTATTCAAG TTCAGTGGGG ACACCAGTGG CTTCAAACCTT CCTGGTTTCA 60  
 TGATATCTTG AGACGCCTTA CAAATGATGG AGGATTCCAA AGAGTTTTTG TTTATTTGGG 120  
 TTAATATTTG TTGGTATTTA TGGCATTGGA GATTGAACT AAGNAATGTT TTAATTTATT 180  
 ACCTTTACAA CATTATTTA CATTACATAC ATACATTTAC AACATTTATT AATTTATNTT 240  
 AAAATAGCAT GNATAAGCCA ATTATNGGTT AGN 273

SEQ ID NO:6806

SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08034

EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCCACTCT TCTCGNCCTC CCAAAGTGTT GGGATTATAG GCGTGAGCAC ANGCGCCCGG 60  
 CCTGNTNTGG ATATTCTTA TAAATGGAAT CATACAGTGC TTNTTTCAGT TAGCATAATG 120  
 TTTCCAGGT TCATCCAGGT CATAACACAT AATCAGGCTT CATTNTTTT TATTACCANC 180  
 TAATATTCTA TGAATATAAA NNNACCN 207

SEQ ID NO:6807

SEQUENCE LENGTH:273

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08036

SEQUENCE DESCRIPTION:

GATCCTGAAG AGATTGAAAA AGAAGAGCAG GCTGCTACTC AGCCTGAGGT TGCAGACTGG 60  
 TCTGAAGGTG TACAGGTGCC CTCTGTGCCT ATTCAGCAAT TCCCTACTGA AGACTGGAGC 120  
 GCTCAGCCTG CCACGGAAGA CTGGTCTGCA GCTCCCACTG CTCAGGCCAC TGAATGGGTA 180  
 GGAGCAACCA CTGACTGGTC TTAAGCTGTT CTGTCATAGG CTCCTAAGCA GCATGGNAAA 240  
 ATGGTTGCTG GCAAATAAAC ATCAGTTTCT AAA 273

SEQ ID NO:6808

SEQUENCE LENGTH:73

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08037

SEQUENCE DESCRIPTION:

GATCTCCAAC ATCTTTGTGT TGAAGGGCCT ACAGAGTAAA CTGTGGGACT CAATAAACAT 60  
 TCGTTACTTG AAA 73

SEQ ID NO:6809

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08038

SEQUENCE DESCRIPTION:

GATCACAGCA GACAGGGTCG CTGCCCTGAT GGCGCTTACA TTCCAGTGGG TCTAATGACC 60  
 ATATCTTAGG ACACAGATGT GCCCAGGGAG GTGGTGTAC TGCACAGGAA GTATGAGGAC 120  
 TTTAGTGTCC TGAGTTCAAA TCCTGATTCA GGAATCACA AAGCTATGTG ACCTTACACC 180  
 AGTCACTTAA CTTGTTAGCC ATCCATTATC GCATCTGCAA AATGGGGATT AAGAATAGAA 240  
 TCTTGGGGTT AGTGTGGNGA TTAGATTAAG TGTATGTAAG GCACN 285

SEQ ID NO:6810

SEQUENCE LENGTH:62

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08039

SEQUENCE DESCRIPTION:

GATCAGTTTC TGGCACATAA ATGCCTCAAT AAAGATTAA TTACTTTGTA TAGTGCTTTA 60  
AA 62

5

SEQ ID NO:6811  
SEQUENCE LENGTH:237  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

10

CLONE:HUMGS08040

SEQUENCE DESCRIPTION:

15

GATCATTGGC TATGACAGAG AACCCGTCTC TCAAGCAGCA GCTCTTCTCC TATGCCATTC 60  
TTGGCTTTGC CTGCTGAGG CCATGGGGCT TTTNTGTTG ATGGTCGCCT TCCTAATCCT 120  
NTTCGCCATG TGAGGNTCCA TGGGGGGTCA CCGGANCTGT TGATACTGCA ACTACACACC 180  
ATTNTTGGTG CTGGGGTGTG TTAAGATTAA ACCATTNANC ACAACGTTTC TCTNAAA 237

SEQ ID NO:6812  
SEQUENCE LENGTH:215  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

20

CLONE:HUMGS08041

SEQUENCE DESCRIPTION:

25

GATCAGCAAA TTTAAGAGAA GACCTAGCTA TGTTGGCTGG TTGCTTTCTA TTATCATGGT 60  
ATTTGACCAT TTTAGTTTAA ATTCCATGTC AGATAAGTGT AAATAGAAGA GTTTAAAAGC 120  
ATGANACATT TCAGANGGTA TCAGTTATAT GATATTCTTT AANCANNTAT GACACATGTA 180  
AATCCTCNTG ANTGACAATN CATCTNTNTG TGAAA 215

30

SEQ ID NO:6813  
SEQUENCE LENGTH:181  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

35

CLONE:HUMGS08042

SEQUENCE DESCRIPTION:

40

GATCTAAAAG CCATATCCTG TCTTTGGTGG TGGCCTGGTA GGAATGGCTT GTNCTAGTTC 60  
TTCAAAGGTA AGATTGACCA AAGCAAAGTC TCATTGGTGG TCTGTGTTTA CATCTCCGT 120  
GTCAAGNTAT TTAAAGCAT GNAAATAAAG CCATTCTTGC CCTTTTTCGT GTGTTTGCAA 180  
A 181

SEQ ID NO:6814  
SEQUENCE LENGTH:162  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

45

CLONE:HUMGS08043

SEQUENCE DESCRIPTION:

50

GATCTCAGGC TTCTGCAGTT CTCATGACTC CTACTTTTCA TCCTAGTCTA GCATTCTGCA 60  
ACATTTATAT AGACTGTTGA AAGGAGAATT TGAAAAATGC ATAATAACTA CTTCCATCCC 120  
TGCTTATTTT TAATTTGGGA AAATAAATAC ATTCGAAGGA AA 162

55

EP 0 679 716 A1

5 SEQ ID NO:6815  
 SEQUENCE LENGTH:431  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08044  
 SEQUENCE DESCRIPTION:  
 10 GATCTCAGCG GGGAGCCACG TCTCTGCAC TGTGGTCTCT GCATGGACCC CAGGGCTGTG 60  
 GGGACTTGGG GGACAGTAAT CAAGTAATCC CCTTTTCCAG AATGCATTAA CCCACTCCCC 120  
 TGACCTCAGC CTGGGGCAGG TCCCAAGTG TGCAAGCTCA GTATTCATGA TGGTGGGGGA 180  
 TGGAGTGTCT TCCGAGGTTT TTGGGGGAAA AAAAAATTTN TAGCATATTT AAGGGAGGCA 240  
 ATGAACCTTN TCCCCANCT NTTNCCNGCC CAAATNTGTC TCCTAGNATC TTATGTGCTG 300  
 15 GGAATAATAG GCCTTNACTG CCNTCNGNT TTATAGGCCN ANGGGTCCCG GTTTCCTGGG 360  
 AACTGGAACC CTTCCTGAGG GGAATCCCG GGGCTCAAAT TACCCCNAA AGGAAAGTGG 420  
 CCAAGGCGGT N 431

20 SEQ ID NO:6816  
 SEQUENCE LENGTH:231  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08045  
 SEQUENCE DESCRIPTION:  
 25 GATCTGTTTC TAAAGCGTTA CGCATCTTTN CTGAAGTATG CTGGAGAGCC TGTCCCTTTC 60  
 ATTGAACCCC CTGAAGCCTT TGAATTTNAT GCACAGCAGC TAAGAAAATT GAGGGAAAAC 120  
 TCTTCTGAA ATAACCAGGC GATACTTTGT TTTGTATATA TTTGTGATC TGTGTCTACA 180  
 TGTATTTTG AAGTATATCT GAGGGAANNG GGAATGGAAA TTTTCTTTAA A 231

30 SEQ ID NO:6817  
 SEQUENCE LENGTH:147  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS08046  
 SEQUENCE DESCRIPTION:  
 GATCCTTCCA GCTGCTCTTC CATAACTTCA TCTCTCCCCT CAACACCTGC AACCACTAAG 60  
 CCATTTTCCC CCTACCCGTC TGTAATTTTG TAATTTTGAG AATGCCAGGT AAATGGAATC 120  
 40 AGAGCGGATA ATCTTTGGAG CATGAAA 147

45 SEQ ID NO:6818  
 SEQUENCE LENGTH:101  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08047  
 SEQUENCE DESCRIPTION:  
 GATCATTTAT ATTTAAGTTT AAAAGGAGGN TGAGACTGAG TTTTGTAGA GTTATAATNA 60  
 50 CATTCAAAAT ATACTTTTTT GCATTGNAA AATGTTAANT N 101

55

SEQ ID NO:6819

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

5 TOPOLOGY:linear

CLONE:HUMGS08048

SEQUENCE DESCRIPTION:

10 GATCAAGCCA AACAGTAAAA ACTACCAAGA GAACACGAGG AAGGCAGAAA CGNTGTTTAG 60  
 CAACAGTATT CTGCATGGTT CACTGCTTAA GAAAATGCCT TCTGGAATAT TTGTAAACTG 120  
 AAATTCTGTA TGTGTAAGNG NTGTTTAAAT ATGTTTGGGT CCTAAACAGC TTTTAAAAAT 180  
 TATACTTGGG CNTAANTTCA GCATCTTTTC AAATCANCTC TNTGCNCCGC CGCTGN 236

SEQ ID NO:6820

15 SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08049

SEQUENCE DESCRIPTION:

20 GATCATTTTG TTTGTTGCTC TCTCTAGTGT CTTCTTCTCT CGTCAGTCTT AGCCTGTGCC 60  
 CTCCCTTAC CCAGGCTTAG GNTTAATTAC CTGAAAGATT CCAGGAAACT GTAGCTTCCT 120  
 AGCTAGTGTC ATTTAACCTT AAATGCAATC AGGAAAGTAG CAAACAGANG TCAATAAATA 180  
 TTTTAAATG TNAAT 195

25 SEQ ID NO:6821

SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS08050

SEQUENCE DESCRIPTION:

35 GATCATAAAT ATTTTGTAAT GAAATACTTC CNCTTTTCCA GGGCTTTGTA TGCACTTGTA 60  
 TAATTACATT GATGGCAATG TAGNGTTTGA ATTCAGTCT GTAAATACTT TTNTGGNAAA 120  
 TAGNAATTTT NATTGCTTTA AAGTTTGGGA TATGGGTGGN 160

SEQ ID NO:6822

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS08051

SEQUENCE DESCRIPTION:

45 GATCTATAGG AAGATTGAAC CTGAATATTG CCATTATGCT TGACATGGTT TGCAAAAAAT 60  
 GGTACTCCAC ATACTTCAGT GAGGGTAAGT ATTTTCCTGT TGTCAAGAAT AGCATTGTAA 120  
 AAGCATTTTG TAATAATAAA GNATAGCTTT AATGAAA 157

SEQ ID NO:6823

SEQUENCE LENGTH:150

50

55



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08052

5 SEQUENCE DESCRIPTION:

GATCCAGNTT GTTGCATCAA TAGTTCTGTT TTTAGTACTG AGTGGGATGT CAGTATAGAT 60  
GTACCATAGT AAACACCTGT GGAAGGACGT CAGGAATGTT TCCTGTTATT AGGTATCTAA 120  
ATAAAGTTGC TGTAAACATT TGTGTACAAA 150

10

SEQ ID NO:6824

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS08053

SEQUENCE DESCRIPTION:

GATCTGTCCA CTTTGCTCTC ACGGACGTGG CATTGCCCAG GAAGGAGAAC CCAGCAGGAA 60  
CGGAGGTCTC TGCCTTCACC TACAGTGAAG GGGCTGGTAT GTGAAATACT TTCACTGAGC 120  
TTAGTGAAAA ATTCATTTTA CACCCTAGTT AGCTCCAGA AAGGTTNAAC TTTCAAGANG 180  
20 GTCAAAATAT GNAGCCTGTT ATATGTGTAA TTAAGAAAGN NNTAGNATAT CCCAAATGGN 240  
ACATTCAGG NATTAANTAA TTGNAATN 268

25 SEQ ID NO:6825

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08054

SEQUENCE DESCRIPTION:

30 GATCTGAGAA GTGAGTGTA GAGGTTTAAA TCAACCTCTG TTCTGTGCTA GTTAAGGTAA 60  
TAAAGTTGCT GCAGTCCAGG GGGTAGGTAC CTGTGGACGG CTCTGCGAAT AGGNCAGTTG 120  
CATTTCCTGG GAATCAAGTG CATCCCTAGG CTGGCAGTGC AGCAGAAATA CTGAATAAAA 180  
TGTGACAAAT CTCCAAA 197

35

SEQ ID NO:6826

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS08055

SEQUENCE DESCRIPTION:

GATCAAGTAA AAATGAAGGA CAACGTGAAG TTAAAGTTC GATGCAGCAG ATACCTTTAC 60  
ACCTTGGTCA TCACTGACAA AGAGAAGGCA GAGAAACTGA AGCAGTCCCT GCCCCCGGT 120  
45 TTGGCAGTGA AGGAACTGAA ATNAACCAGA CACACTGATT GGAAGTGTAT TATATTAAAN 180  
TNCTAAAAAT CCTAAA 196

50 SEQ ID NO:6827

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS08056

SEQUENCE DESCRIPTION:

5 GATCATCAGT ACTGTTGTCT CATGTAATGC TAAAACTGAA ATGGTCCGTG TTTGCATTGT 60  
 TAAAAATNAT GTGTGAAATA GAATGAGTGC TATGGTGTG AAAACTGCAG TGTCCGTTAT 120  
 GAGTGCCAAA AATCTGTCTT GAAGGCAGCT ACACTTTGAA GTGGTCTTGT AATACTTTTA 180  
 ATAAATTTAT TTTGATAAAT AATATTGAAC AAA 213

10

SEQ ID NO:6828

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS08057

SEQUENCE DESCRIPTION:

15 GATCGTCCTG CAGGTATTTT GCAAGCCCCT ACTGTCCGCC GACATCAGCG TGAATCTCAC 60  
 ATGGTGCAC TGGCTCCCTG GGGGAGTNTT NGCNTCTCCT GTTGTCTTTT CCCAAAACCA 120  
 NTA AAAACCA TGN 133

20

SEQ ID NO:6829

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

25

TOPOLOGY:linear

CLONE:HUMGS08058

SEQUENCE DESCRIPTION:

25 GATCTGCTAC ATTTTAAAAG TGGGCATGAA AATCTTCTGT TATGTATGTA CTGTCATTAA 60  
 TTCTGTTATT TTTNCCCACT AGTACTATCA ACTACAGTAA AGACCTTCCT CTGGCCCAAG 120  
 30 GAATCAAGTT TCAGTAAAGG TGTTTTAGAT GANCATCCCT TAATTGAGG TGTTCAGCA 180  
 GCTGTTTTTG GNGANGACAA AGNAAATTAA NGTTTTCCCT GAATAANTGC ATTATTNTGA 240  
 CTGTGACAGT GNCTAATCCC CCTATGGTN 269

35

SEQ ID NO:6830

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08059

40

SEQUENCE DESCRIPTION:

40 GATCTATCCA ATAAAGGAGA GAAACAACCG CACACGCCCTG GCTCTCATCA TATGCAATAC 60  
 AGAGTTTGAC CATCTGCCTC CGAGGAATGG AGCTGACTTT NACATCACAG GGATGAAGGA 120  
 GCTACTTGAG GGTCTGGNCT ATAGTGTAGA TGTAGAAGAG NATCTGACAG CCAGGGATAT 180  
 45 GGNCTCAGCG CTGAGGNCAT TTGNTACCAG ACCNGNGCAC AAGTCCTCTG NCAGCACATT 240  
 CTTTGGTACT CATGTNTCNT GGCATCCTGG NGGGGTNTCT TCGGAACTT GTTCTGN 297

50

SEQ ID NO:6831

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

55

EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS08060

SEQUENCE DESCRIPTION:

GATCATGGTG GTTTGGCAGC AGGGAATTTG TCTTGTGGA GCCTGCTCTG TGCTCCCCAC 60  
TCCATTTCTC TGTCCCTCTG CCTGGGCTAT GGGAAAGTGGG GATGCAGATG GCCAAGCTCC 120  
CACCTGGGT ATTCAAAAC GGCAGACACA ACATGTNGCT CCACGCGGCT CAAA 174

SEQ ID NO:6832

SEQUENCE LENGTH:253

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08061

SEQUENCE DESCRIPTION:

GATCAATTTT GGAGACCTTG GCCGCCCAGG ACGTGGCGGC AGGGGAGGAC GAGGTGGACG 60  
TGGGCGTGGT GGGCGCCCAA ACCGTGGCAG CAGGACCGAC AAGTCAAGTG CTTCTGCTCC 120  
TNATGTGGAT GACCCAGAGG CATTCCCAGC TCTGGCTTAA CTGGATGCCA TAAGACAACC 180  
CTGGTTCCCT TGTGAACCTT TCTGTCAAA GCTTTTGCAT GCTTAAGGAT TCCAAACGNC 240  
TACTGTAATT AAA 253

SEQ ID NO:6833

SEQUENCE LENGTH:86

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08062

SEQUENCE DESCRIPTION:

GATCATGAAC CAAAGGAATT TATGTTTTGT AACTTGGGTA CTTTATTTTG CATTTTGTTA 60  
TACTATTAAA TANTTTTNTC CTGAAA 86

SEQ ID NO:6834

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08063

SEQUENCE DESCRIPTION:

GATCCAAGTT TCACTTTTGT TGATATAATG AGCCAGTTTT CTCAGTAATG TCTACTAAAA 60  
AAAAAGCCAT TAACCNNGNT CTAATATTTG CATGATTCTA ATAAANGTAT GTCAACTTCT 120  
TAAA 124

SEQ ID NO:6835

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08064

SEQUENCE DESCRIPTION:

GATCCCTCA GAAGGCAGGA GTGCTGCCCT CTCCCATGGT GCCCGTGCCT CTGTGCTGTG 60

TATGTGAACC ACCCACGNGA GGGNATAAAC CTGGCACNNG GACCAAA 107

SEQ ID NO:6836

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08065

SEQUENCE DESCRIPTION:

GATCCTCCTG TCTTGGTTTC CCAAAGTGCT GGGATTGCAG GTGTGAGCTA CTGCACCCGG 60  
 CCCAATAAAA AAATCTCGTT CTGTGAAAGA AATGTTTAAT AAAAGTTGTA TTGTCAAATT 120  
 TTAAT 125

SEQ ID NO:6837

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08066

SEQUENCE DESCRIPTION:

GATCACTAAG ATTAGCTATA TCTATACAGT CATTAGTTTG ACAAGAAATA GNATCCTGTC 60  
 AGATGCCAAA GAGTGGGATT TTNATGTTTA ATGATTAAAC ACCATTATTT ATTGACAATT 120  
 TACCCTGTGG AACTGTATTA TTTCTAACTA TGAAATAAAG GGGTGATGTA AACACAAA 178

SEQ ID NO:6838

SEQUENCE LENGTH:222

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08067

SEQUENCE DESCRIPTION:

GATCCCCGGC CAAGCCCAGT CACGNGAATT TAAGGCTCTT CTCTCCGGCT CCAGCCTGTG 60  
 CCTGTAATTG TCCAGGANTG GCCTAGGCCG ACACCTTCTG CTGCCCCGGA GTCCCTCCC 120  
 TGGGTGGGAT GCTCACTACA GCTCTGATGT ATATAGCACA CAGCCCAANT CCGACCCTCC 180  
 GGTCTGTCGC CAATAAAGNG GGGTGTGTTT CANTCCGGGA AA 222

SEQ ID NO:6839

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08068

SEQUENCE DESCRIPTION:

GATCCCAACA GGCCCTGGCA GCGTCTGGAC ATGTGTAAC AGCAGCAGTC ACGTTCCTCG 60  
 GCTGNCACAA CCAACACNNN AGCAGGTTT CCATTTTCTG TACTTTNATA TTTCTGTTCA 120  
 ACCTGTTGGT TTCTACAATG ATTTTAAACA TTGGNAAGNC AGCCTTGNGT ATATTTTAA 180  
 AAATTATATT NAAAATGN 198

SEQ ID NO:6840

EP 0 679 716 A1

SEQUENCE LENGTH:284

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

5

CLONE:HUMGS08069

SEQUENCE DESCRIPTION:

GATCATGAAA CTTAGTAGAG GGGATTGTGT GTATTTNATA CAAATTTAAT ACAATGTCTT 60  
 ACATTGATAA AATTCTTAAA GAGCAAAACT GCATTTAATT TCTGCATCCA CATTCCAATC 120  
 ATATTAGANC TAAGNTATTT ATCTATGAAG ATATAANTGG TGCAGAGAGA CTTTCATCTG 180  
 TGGATTGCGT TGTTCCTTAG GGTTCCTAGC ACTGNTGCCT GCACAAGCAT GTGNATATGT 240  
 GANATNNNAT GGATTCTTCT ATAGCTAAAT GNGTTCCTC TNGN 284

SEQ ID NO:6841

15

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08070

SEQUENCE DESCRIPTION:

GATCCACCTG CTTGGGCTC CCAAAGTGCT GGGATTACAG CTGTAAGTCA CTGATNCCGG 60  
 NTGCATGTCA AGCACATTGG NAAGTTCTTA CAACAATTCT GNTGGAGGNT TTTN 114

SEQ ID NO:6842

25

SEQUENCE LENGTH:253

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08071

SEQUENCE DESCRIPTION:

GATCTGTCTC TCAAAGGAAG AAACAAAAAC CAAAATTTT GACTGCAAAA GATTGACTAA 60  
 TTCTAGGTGC AAATACTGG AAATTTAGGA TTGTTATTGT ACTACACAGG TCACAANGTT 120  
 CCAAACCTAT TTCCCTTGTG ATTTTGTAGT CATGATTTT CAGAATGCAG TTTCTATCTT 180  
 TTTAGGTGCA ATATTACGAA CTGCTTAGGT CAGANCANTT TNGTNTCTCC AGTTTTTTCT 240  
 CCCTANGTTA CAN 253

SEQ ID NO:6843

40

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08073

SEQUENCE DESCRIPTION:

GATCTTATAA CCTCATTGTT TCCTAATCAT TTTATTTTCT CTCCTGCTAG TACTGTGCCG 60  
 CTTCCCCCTC CCCCCACACA AAATAAAAC AGTATCTGCC AAA 103

SEQ ID NO:6844

50

SEQUENCE LENGTH:110

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55

EP 0 679 716 A1

CLONE:HUMGS08074  
SEQUENCE DESCRIPTION:  
5 GATCCGTGCC CCACCTCTCC CCAGTTAAGT GCCTTCACAC AGCACTGGTT TAATGTTTAT 60  
AAACAAAATA GAGAAACTTT CCTTATAAAT AAAAGTAGTT TGCACAGAAA 110

SEQ ID NO:6845  
SEQUENCE LENGTH:246  
10 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08075  
SEQUENCE DESCRIPTION:  
15 GATCAGGGCT GAGGGTAAGG AAAAGAAGAG ACTAGGAAAG CTGGGCCCAA AACTGGAGAC 60  
TGTTTGTCTT TCCTGGAGAT GCAGAACTNG GCGGCTGGAG CAGCAGTGTG AGCATCAGGG 120  
CGGAAGCTTT AAAAGCAGCA GCGGCNTGTG CCCCAGGGCA CCCAGAATGA TTCCCTATG 180  
GGCACCAGGC CAGNGAAAAA ATTGGGCAGC NTCTTTAAAG GNGGAAAAAT TGTTTGTGAGC 240  
CCCAAA 246

20 SEQ ID NO:6846  
SEQUENCE LENGTH:105  
SEQUENCE TYPE:nucleic acid  
25 TOPOLOGY:linear  
CLONE:HUMGS08076  
SEQUENCE DESCRIPTION:  
GATCTACCTG CATATAACAG TCTCTAAGTT TTTTTTCAA TCTTGCANTT TGATAATTT 60  
GATTTTGCC ANATTAGNNT AATTGGGAC TATCCTGAAA CAGNN 105

30 SEQ ID NO:6847  
SEQUENCE LENGTH:26  
SEQUENCE TYPE:nucleic acid  
35 TOPOLOGY:linear  
CLONE:HUMGS08077  
SEQUENCE DESCRIPTION:  
GATCAAAAGA GCTGTCTGAC TGCAAA 26

40 SEQ ID NO:6848  
SEQUENCE LENGTH:84  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
45 CLONE:HUMGS08078  
SEQUENCE DESCRIPTION:  
GATCCCTTGA GCCCAGGAGT TCCAGACCAG CCTGGGAAAT ATAGGGAAAC CCTGTCTTTA 60  
CAAAAAAATA TTTTAAAAAT TAAA 84

50 SEQ ID NO:6849  
SEQUENCE LENGTH:217

55

SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 5 CLONE:HUMGS08079  
 SEQUENCE DESCRIPTION:  
 GATCAGATTC CTGACTAACC CCTCTCTTAG AGCTACAGCG AGCTGCATTA CCAGCTTAAA 60  
 ACACTTCTTA GGGATTAAAT ATAGNTGTNA TTTTCAAAA TCGTTTTTAA TTAAACTGT 120  
 GTTTTAGTGT AAAATTGTTA ACCTTGTAAG ATGGATANTG TGTATANGAN TGTAGGCCTT 180  
 10 AACTATTCA CATGAGTCAA ANCANGGCNG CTTTAAN 217

SEQ ID NO:6850  
 SEQUENCE LENGTH:93  
 15 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08080  
 SEQUENCE DESCRIPTION:  
 GATCTCACCC AGTGTGCAAT TTGTGAAAAT GAACCAAATG TCATTACTTT TGTCTTAAAG 60  
 20 CAAAGTCTAT TTCAAGNATA TGNACAGCAN AAA 93

SEQ ID NO:6851  
 SEQUENCE LENGTH:73  
 25 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08081  
 SEQUENCE DESCRIPTION:  
 GATCAATGAA CCATCTCTTC TGGGCAGTTT TGTTGAAAAT AAAGGTTTCT CTTTGATTTC 60  
 30 AAGAAATGACC AAA 73

SEQ ID NO:6852  
 SEQUENCE LENGTH:104  
 35 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08082  
 SEQUENCE DESCRIPTION:  
 GATCACCGGT TTCCGACTGA GTCTGGGGAT TTNGGCCTTG TTGAACCCTC CTACGGTGCC 60  
 40 CNGGGAATTT GAAANACGCT TTCTGCATNG ATATNTGGGC CCTN 104

SEQ ID NO:6853  
 SEQUENCE LENGTH:123  
 45 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08083  
 SEQUENCE DESCRIPTION:  
 GATCAACATC ATTAAAGATT ATGTAAAAAG TTAAGGCT TATGAGCCTA AGTTTGTTCC 60  
 50 TATATTACCA TATTACTGA ATNTCTGGN AAAGNACTT TANTAAAGTT TAATCTNAGG 120  
 AAA 123

55

SEQ ID NO:6854

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08084

SEQUENCE DESCRIPTION:

GATCACTTGA GCCTAGGAGG CAGNGGTTCA AGTGAGCTGA GATGGCACTC CTGCGCTCCA 60  
GCCTNGGTGA CAGCGTGAGA NNCTGTCTCA N 91

SEQ ID NO:6855

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08085

SEQUENCE DESCRIPTION:

GATCTGTCAG NACCATTGGA AAAGTGTCTC AAGAGCAGTT GCTTATATAT AGTAGGATTT 60  
TACTTTTTCC TGCTTATGTA NTACTATATG CTAAAAAAC CTGGAGGAAT ACTTACCAAA 120  
GAGGAGTAAC CATCTCTGAG GGTGGGATTC TGGGGGANTT TTTGTTTTTT TCTGTTTTCT 180  
ATANTGTGCA NCTNTTNTAG TATGTNTNTT NCTAATTGN 219

SEQ ID NO:6856

SEQUENCE LENGTH:66

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08086

SEQUENCE DESCRIPTION:

GATCTTNCTC CATTACAGT ACATTCTTAG GATGTATGTA GTAAATAAAG CTTTCTTTAA 60  
AGCAAA 66

SEQ ID NO:6857

SEQUENCE LENGTH:43

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08087

SEQUENCE DESCRIPTION:

GATACCCCG TAGGAAATAA AGCAGGCATC TCTGGACCTC AAA 43

SEQ ID NO:6858

SEQUENCE LENGTH:338

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08088

SEQUENCE DESCRIPTION:

GATCAAAAGA CAGNTAAATN TTTCTTCTAG AACACAGTTA CCCCCTTGCT TCATCTATTG 60



EP 0 679 716 A1

5 CTAGAACTAT CTCATTGCTA TCTGTNATAG ACTAGTGATA CAAACTTTAA GAAAACAGGN 120  
 TAAAAAGATA CCCATTGCCT GTGTCTACTG ATAAAAATTAT CCCAAAGGTA GGTGGGTGTG 180  
 NTAGTTTCCG NGTAAGACCT TAAGGCCACA GCCAANCTCT TAAGTACTGT GTGNCCACTC 240  
 TTGTTGTTAT CACATAGTCA TNCTTGTTG TACTATGTGA TGGTTAACCT GTAGCTNATN 300  
 ANTNTACTTA TTATTCTNTT CCTCCTTTAC CTCANCNN 338

10 SEQ ID NO:6859  
 SEQUENCE LENGTH:251  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08089  
 SEQUENCE DESCRIPTION:  
 15 GATCGTTTGC AAGTAACTGA ATCCATTGCG NCATTGTGAA GGCTTAAATG AGTTTAGATG 60  
 GGAAATAGCG TTGTTATCGG NTTGGGTTTA AATTATTTGA TGAGTTCCAC TTGTATCATG 120  
 GCCTACCCGA GGAGANGNGG NGTTTGTTAA CTGGGCCTAT GTAGTAGCCT CATTNCCAT 180  
 CGTTTGTTAT ACTGACCACA TATGCTTGTC ACTGGGCANG AAGCCTNTTT CNGCTGCCTN 240  
 20 CACGCANTTT N 251

25 SEQ ID NO:6860  
 SEQUENCE LENGTH:359  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08090  
 SEQUENCE DESCRIPTION:  
 30 GATCTTAATA TAAATNCACT TTCATTTTTN ATAGCTGTCC CATCTGGTCA TTTGGTTGGC 60  
 ACTAGACTGG TGGCAGGGGC TTCTAGCTGA CTCGCACAGG GNTTCTCACA ATAGCCGATA 120  
 TCAGAATTTG TGTGAAGGA ACTTGCTCTC TCATCTAATA TGNTAGCGGA NAAAGGAGAG 180  
 GAAACTACTG CCTTTAGAAA NTATAAGTAA AGTGATTAAA GTGCTCACGT TACCTGNCA 240  
 CATAGTTTTT CAGTCTATGG GTTTAGTTAC TTTAGNNGGG NAGCNTGTNA CTTATATTAN 300  
 TAGTANTTTN GTAAAGTTGG NTGGATAAGC TATCCATGTT GCCAGGTTCA TGGATTNGN 359

35 SEQ ID NO:6861  
 SEQUENCE LENGTH:75  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 40 CLONE:HUMGS08091  
 SEQUENCE DESCRIPTION:  
 GATCCCCAAA CCACAAATAC ATATGTGTGC CTAAGTTTGT GCATGCATAC ATTAACAGG 60  
 ACATAAAGTG TTA AAA 75

45 SEQ ID NO:6862  
 SEQUENCE LENGTH:228  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 50 CLONE:HUMGS08092

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## SEQUENCE DESCRIPTION:

5 GATCATCATG GCAAAACCAG CTGGTGGGCC CAAGCCTCCA AGTGGGAAGA AAGACTGGGA 60  
 TGATGACCAA AATGATTGAA ATTGGCTTAA TTTTACTGT AGGTGAAGGC TGTATTGTA 120  
 GTAGTACTCA AGAATCACCT GATGTNTTCT TATTCTCCTT AAATTAAGAG TTATTTTGTN 180  
 TTTGTNTTCT TGGCTGGATG TTATAATAAN CATATTGTNA CTGTCAAA 228

SEQ ID NO:6863

SEQUENCE LENGTH:299

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08093

## SEQUENCE DESCRIPTION:

15 GATCATGCCT ACTTCTTCT NTGTATCTCC CTCCTTCCCA GCCCACC CGG GCAGCAGACT 60  
 CTNATGGAAG NAAGGTGCCG TAGTGGGNTT TTAGAACTA ACGGGACTGG TTTCAAAGC 120  
 AGTTATCTTG GGAAGCTGTT TATCCAGCG ATGTGACTTT TTNAGAATA TTTCTTGGAA 180  
 TCATATTGAG AGTCTGGGGC TGTGTGTGA GCAGCCTTAA GGNTGCTAGA CACTCATTTA 240  
 GTGCCCAGGG AGTCCAGCGA ATGACGCTG TGGCCAAGCG AGGTCTCAGG TGCAAAGCN 299

SEQ ID NO:6864

SEQUENCE LENGTH:298

SEQUENCE TYPE:nucleic acid

25 TOPOLOGY:linear

CLONE:HUMGS08094

## SEQUENCE DESCRIPTION:

30 GATCCTCTGA ACCTGCAGAG GCCCNCTCCC CGAGCCTGGC CTGGCTCTGG CCCGGTCCTA 60  
 AGCTGGACTC CTCCTACACA ATTNATTNA CGTTTTATTT TGGTTTTCCC CACCCCCTCA 120  
 NGNNTGTCGG GGAGCCCTG CCCTTNACCT AGCTCCCTTG GCCAGGAGCG AGCGAAGTGT 180  
 NGGCCTTGGT GAAGCTGCCC TCCTCTTCTC CCCTCACACT ACAGCCCTGG TGGGGGAGAA 240  
 GGGGGTGGGT GCTGCTTGTG GTTAGTCTT TTTTTTTTTT TTTTNTTTN TNANAAAA 298

SEQ ID NO:6865

SEQUENCE LENGTH:296

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08095

## SEQUENCE DESCRIPTION:

40 GATCTGCGGG GCAANTTCAA GCNNNCCCCA CTGCGGAGGG TGCGCATGTC GNCCGATGCC 60  
 ATGCTCAAGG CCCTGCTGGG CTCGAAGCAC AAGGTGTGCA TGGACCTGAG GGCCAACCTG 120  
 AAGCAGGTCA AGAAGGAGGA CACAGAGAAG GAGCGGGACC TGCGAGACGT GGGTGAAGTGG 180  
 AGGAAGAACA TCGAGGAGAA GTCTGGCATG GAGGGCCGGA AGAAGATGTT TGANTCCGAG 240  
 TCCTAGGCCA CTCGCTGCCC CTACGNTGTC CCCGGTGCCC GGTCCCAGC AGAANN 296

SEQ ID NO:6866

SEQUENCE LENGTH:310

50 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS08096

SEQUENCE DESCRIPTION:

5 GATCCTGTTC TGTCAGCTGC ACCCTGAGCA AAAACTTGCC ACACCAGNGC TCCTAGAAAC 60  
 AGCCCAGGCT TTGGAGCGGA CCCTGAGGAA GCCTGGGAGG GGTGGGATG ACACGTATGT 120  
 CTTGTCAGAT ATGCTCAAGA CGGTGAAAAT TGTGTGACTG CTTAGGCCAA GCAGCCCTCC 180  
 TGCCTAGAAT GACCTTGGAC TCCCAGCCTG CCAGNGAATG NAGAAATACA ACGCACAGTA 240  
 10 CTTTGAAGC TTCGTATTTT TCTTGGTTTC AACTCAGCT ACATGTGACC TCCAGCTTGG 300  
 TCGCGTTAGN 310

SEQ ID NO:6867

SEQUENCE LENGTH:285

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08097

SEQUENCE DESCRIPTION:

20 GATCAGTTCA AGAAGGTAAT CCAAGGGCCT GATGACTCTT TTGGTAACCA GACACCAATC 60  
 AAATAAGGGG AGGAGATGAA AATGGAATNA TTTCTTCAT GCCACCTGTG CCTTAGGAA 120  
 CTGCCAGAA GAAAATCCAA GGCTTTAGCC AGGAGCGGAA ACTGACTACC ATGTAATTAT 180  
 CAAAGTAAAA TTGGGCATTC CATGCTATTT TTAATACCTG GNTTGCTGAT TTNCAAGAC 240  
 AAAATACTTG GGGTTTTC AATAAGATTG TTGTAATATT GNAAG 285

25

SEQ ID NO:6868

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS08098

SEQUENCE DESCRIPTION:

GATCAGACTC TGTATCAAAA GTACCTTTGC CCTAGGAAG AGTGAGTATT GGAGTCATCT 60  
 TATCTATTAC TCCAAACCTC CCTTTNATT TCTTGAGCCT GGCTTGGACC TTGGCATTCC 120  
 35 GTTTGANITC CTTCTAAGTG GAACATTTGT GTTGTATCTG TAACACTGGC ACTGAAATAA 180  
 AGACCACACG GTTAAAGNAA A 201

SEQ ID NO:6869

SEQUENCE LENGTH:50

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08099

SEQUENCE DESCRIPTION:

45 GATCATGTGC TGCCTTTTAC TGCTGAATTA AACAGATAT TTCACGNAAA 50

SEQ ID NO:6870

SEQUENCE LENGTH:43

50 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55

CLONE:HUMGS08100

SEQUENCE DESCRIPTION:

GATCTTCAGT GTAAATNACC ATGTATAAAC TGTAAGTGC AAA

43

5

SEQ ID NO:6871

SEQUENCE LENGTH:247

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS08101

SEQUENCE DESCRIPTION:

GATCATTTAA TATATTCATA TTACCAAGAC TATTATACTG GAAGTGGTTT TTGTGTTATA 60

AAGGTTTAAT TTTACATANG GCAGTTACTT AATGTGATT TNAACCCCTA AAAAAGTGGA 120

15

GATGTATACA TTTGTTAACA ATGCCATGAA AGCATTNCT TTCTCCTAAG GAAAAGTGAA 180

TTTCTTATCA GAATATCTGG CTGGCCCTGT AATTTAAATT AAAATAAANT TTTGGCGNAN 240

CAGCAAA 247

SEQ ID NO:6872

20

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08102

25

SEQUENCE DESCRIPTION:

GATCTATCTG AGAACAAAGA AGTCGACAGA ATAACATTGA TGACTTTTTA AATAATTAAT 60

TTATTTGAAG AATGCTTGCA TACAAAAAGC TTCCTGCAGG AATTTTAAAC AAGCTGTCCT 120

TGGTTATCCC AGGCAATGTC AGTTGATTTA NTTAAGTTTA CATGCAAAAG NGAATACAAT 180

TGTAACATTA ATTGGAACAT TAAGTTGGCT TATAAGCAGT ATTTCCACTG CTCCTACAAT 240

30

TGNTTTNNGT TATTGATAN TTNATTTNAN ATTNNGTNTT GGTGTGGN 288

SEQ ID NO:6873

SEQUENCE LENGTH:294

35

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08103

SEQUENCE DESCRIPTION:

GATCGTACCT ATTGCACTCC ATCCTGGATG AAAGAGCCAG ACTCTGTCTC AAAACAAACA 60

40

AAAAAGCGTG GGGACTTCTG GGGACAGACA AGGTGCCTGT AATATATTN CTCAGTCTTT 120

GCCCTGAATG GTCTCAGCTT GANACCATNT CAAACTGGAG AGAAGCAAGC CAGCCAATAG 180

AATGGGGTGA TTTACAGGGA TTTCTGTTTA CTGTCAAAAT ATTTCTCATC TGCACATATGT 240

TTCCATTTGT GGTCTGAAG GAAATCTTA TAACTCAACA TTTGTCTGGT CTTN 294

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SEQ ID NO:6874

SEQUENCE LENGTH:295

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS08104

55

# EP 0 679 716 A1

## SEQUENCE DESCRIPTION:

5 GATCCGACAC TCCAGGCAGA GCAGAGGGCA GGAGAGGCC AAAGAGCTAG GTCAAGCAGC 60  
 TGGCTCCCT GGAAGGGGAG CCGGGAGACA GGGAGGTCCT CACTGCCC CCGTGGCCAC 120  
 GCATGGCTGT CTGCACACTC CATCAGGAGG AAGGGCAGGG GAGAAGTCAC ATGCNGTACA 180  
 GTGAAACTNA TCAGTGTAC ACACGCCAG CAGGAGGGGA GAGCTCTGCT CCACACGCTG 240  
 GCGGCCTTGG CTGCTCCANA GCAATCCGNT TGCTCCANCT TCAAGCCATT GGGGN 295

SEQ ID NO:6875

10 SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08105

## 15 SEQUENCE DESCRIPTION:

GATCCTGTAT TATCCATCTA CATCAGAACC AAATACTTC TCCAACACCC GGCAGCACTT 60  
 GGCCCTGCAA GCTTAGGATG AGAACCACTT AGTGTCCAT TCTACTCCTC TCATTCCCTC 120  
 TTATCCATCT GCAGGTGAAT CTTCAATAAA ATGCTTTTGT CATTCAA 168

20 SEQ ID NO:6876

SEQUENCE LENGTH:141

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS08107

## SEQUENCE DESCRIPTION:

GATCCTTGAG ATGACTGTAG CCCTGGCTGA CAATTNATT GCTGCCTGTN AAGGACCCTG 60  
 AACCAGAGGA CTCAGCGAAA TTGTGCCAG ATTCCTGACC TACAGCGGCA GTGAGATAAT 120  
 AAATGCTGTT GAGGTCACAA A 141

30 SEQ ID NO:6877

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS08108

## SEQUENCE DESCRIPTION:

GATCTGCTCA CCCTCGGTNC ACANCACTGT CAGCCATGCA AGCAGGACAG AATGGTGACT 60  
 GGGTSCCAT NGTGAGCTGT GTATTCCTA GGAGGTAGAA AACAATAAAA AATTGCATGC 120  
 TAAA 124

40 SEQ ID NO:6878

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

45 CLONE:HUMGS08109

## SEQUENCE DESCRIPTION:

GATCCTCTG CCTCAGCTC CTGGGTGGCT GGGACTGCAG ATACATGCCA CCATGCCGGA 60  
 CAAATTTNTT GTATTTNAG TAGAGATGGG GTTTTACCAT ATTGCTCGGA TTGGTCATGA 120

55

# EP 0 679 716 A1

5 ACTCCTGGAT TCAAGCAATC TGCCACCTA GCCTCCCTAA GTGCCTGGCC AAATTTTGG 180  
TTTTAATAGT CGATTGTGT ATATTTTGTG GTAGTATCTA CATATATTTA ATACATTAT 240  
NTGTTGNTGN AAAAAGTANA ATTTGTAAAA NNTTGNAAA 280

10 SEQ ID NO:6879  
SEQUENCE LENGTH:198  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08110  
SEQUENCE DESCRIPTION:  
15 GATCATTGTT GAACTTCAGC TCCAGTGTCT CTCCAGAATA AGACATTGGC ATTCAAATGT 60  
CTATATCTTG TTAATTACAA AATAAAAAAC AGATTAATTA GTGGCTTTTA AATTGTAGTT 120  
ATATCNGTGT ATATACACGC GGGGNACTGT ATAAAGACAT ACTAAAGGGC ACAGATTAAA 180  
ATAAGTATTA TTANTAAA 198

20 SEQ ID NO:6880  
SEQUENCE LENGTH:66  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08111  
25 SEQUENCE DESCRIPTION:  
GATCAAAGTT GTTAAAATTA TAAATNTATG ATGCAGNAAT AAAATTGATA TATTTTGATA 60  
TTCAAA 66

30 SEQ ID NO:6881  
SEQUENCE LENGTH:100  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08112  
35 SEQUENCE DESCRIPTION:  
GATCTCTTAC CTTTGAAAA TAGGGGTTAG GCATGAAGGT GGTGTGATT AAGAAGATGG 60  
TTTTGTTATT AAATAGCATT AANCTGGAAT TGACAAGAAA 100

40 SEQ ID NO:6882  
SEQUENCE LENGTH:30  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08113  
45 SEQUENCE DESCRIPTION:  
GATCAAAGAA ATAATTCTTT TGCCACTAAA 30

50 SEQ ID NO:6883  
SEQUENCE LENGTH:172  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

55

EP 0 679 716 A1

CLONE:HUMGS08114

SEQUENCE DESCRIPTION:

5 GATCACTACA ACAATTTGNC TGCCTCCAAG GTCCTCTGAG GCAGAAGGCT CTGGGGNTTC 60  
TGCTGTCTT TGGNGGGTGT CTTCTGGGTA GAGGGATGGG AAGGAAGGGA CCCTCACCCC 120  
NGGCNCTTCT TCTGACCTG CCACTAAAAA ATTTATGGNC CAAGGGCNCA AA 172

SEQ ID NO:6884

SEQUENCE LENGTH:291

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08115

SEQUENCE DESCRIPTION:

15 GATCAGCAAT NAGGGTGAGG ACAAATCTT CTTAATCAAC AAGCTTCACT CCATCTACGA 60  
GAGGAAGGAG AGGGAGGAGA GGAGCAGGCT TGGGACAACC GAGGAGGCTG CGGCACCCCC 120  
TGCCCTGCTC ACAGATGAAC AGGATGCCTA GGGGGACGGC GATGGGCCTC ACGGGCCCCG 180  
CCAGCACCTT GAGACCACAC TGTTGCCTCC CAGTGACCCT GCTGGGACAC CAGGACAAGG 240  
AAGACAGTTT CGCCTCTNGA AAGCCGCAGC TGCGCCTAGG CTGGAGCTGG N 291

SEQ ID NO:6885

SEQUENCE LENGTH:30

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08116

SEQUENCE DESCRIPTION:

GATCTGTAAA TAAAACTTAC ATTTTCAAA 30

SEQ ID NO:6886

SEQUENCE LENGTH:291

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08117

SEQUENCE DESCRIPTION:

35 GATCTGCCTG CCTCGGNCTC CCAAGTGCTG GGATTACAGG CGNGAGCAGC TGCACCCAGC 60  
CTAGAATCTT GTATAATATG TAATTGTAGG GAAACTGCTC TCATAGGAAA GTTTTCTGCT 120  
TTTTAAATAC AAAAATACAN AAAAATACAT AAANTCTGAT GATGAATATA AAAAAGTANC 180  
40 CAACCTCATT GGNACAAGTA TTAACATTTT GGAATATGTT TTATTAGTTT TGTGATGTAC 240  
TGTTTACAA TTTTNACCAT TTTTTCAGT AATTACTGTA AANNNGNNNN N 291

SEQ ID NO:6887

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08118

SEQUENCE DESCRIPTION:

50 GATCCCAAGC TCAGTCCCA CAAAGTTCAG GGCCGGTCGG AGGCAGGGGC AGGTCCGGGT 60

EP 0 679 716 A1

5 CCAAAGCAAG GACACCACAG CTCTCCGAC TCCAGCAGCA GCTCCAGCGA TTCGGACACG 120  
 GATGTGAAGT CCCACGCTGC TGGCTCCAAG CAGCACGAGA GCATCCCGGG CAAGGCCAAG 180  
 AAGCCCAAAG TGAAGAAGGA GAAGGGCAAG ANGGNGAAGG GCAAGANGAN GGAGGCTCCC 240  
 CACTGANGGG CCCTGGACAG GGCTCATTAA ACCTTCCTCT CTGCCAAA 288

10 SEQ ID NO:6888  
 SEQUENCE LENGTH:308  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08119  
 SEQUENCE DESCRIPTION:  
 15 GATCCGCATT GAAGACCCAC CCCGCAGAAA GCACATGGAA TTCCTGGGTG GTGCAGTTCT 60  
 AGCGNTTATC ATGAAAGNCA AAGACAACCT TTGGATGACC CGACAAGAGT ACCAAGAAAA 120  
 GGGTGTCCGT GTGCTAGAGA AACTTGGTGT GACTGTTCGA TAAACTCCAA AGCTTGTTCC 180  
 CATCATACCC GTAATGCTTT CTTTTTCTCT TTATTGCCAA TCTTTGAACT CATTCAACTC 240  
 CAGGACATGG AAGAGGCCTC TNTCTGCCCT TTGACTGGAA NGGTCAANGT TTTATTCTGG 300  
 20 TTGTCTGN 308

25 SEQ ID NO:6889  
 SEQUENCE LENGTH:308  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08120  
 SEQUENCE DESCRIPTION:  
 30 GATCATGTCT TTTGCAGGAA CATGAATGGA GCTGGAGGCT ATTATCCTTA GCAAACAAAT 60  
 GCAGGAACAG AAAACCAAAT ACTGCACGTN CTCACCTATA AGAGGGAGCT AAATNATGAG 120  
 AACTGATGAA CACAAAGAAG GAAACAACAC ACAATGGGGT CACTTGACA GTGGAAGGTG 180  
 GGAGGAGGGN GAGGAGCAGA AAACATAACT ATTGGATACT GGGCTTAGTA TCTGGGTGAT 240  
 GAAATAATCT GTACAACAAA CCCCATGNC ACAAGTTCAC CAATGTAACA NACCTTCACA 300  
 35 TGTACCCN 308

40 SEQ ID NO:6890  
 SEQUENCE LENGTH:224  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08121  
 SEQUENCE DESCRIPTION:  
 45 GATCAATCC CTTGAATAGG GAAGTAACAT TTGCCTTAAA TTTTTCGAC CTCGTCTTTC 60  
 TCCATATTGT CCTGCTCCCC TGTTTGACGA CAGTGCAATT GCCTTGTTNAC CTGTGAGCTG 120  
 GAGAGAACCC AGATGTTGTT TATTGAATCT ACAACTCTGA AAGAGAAATC AATGAAGCAA 180  
 GTACAATGTT AACCCATAAT TAATAAAGA GTTAACATCC CAAA 224

50 SEQ ID NO:6891  
 SEQUENCE LENGTH:28  
 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear  
 CLONE:HUMGS08122  
 SEQUENCE DESCRIPTION:  
 5 GATCAAAATAA AGTTATAAAA TTGCCAAA 28

SEQ ID NO:6892  
 SEQUENCE LENGTH:140  
 10 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08123  
 SEQUENCE DESCRIPTION:  
 15 GATCAGGCCT GGCCACTCCT CTTGGAGGG CGGTTGAGGC CCACCTGCCT TGGGCTTCCC 60  
 AATNCTGATT CCNNTACTAC ACCCTTCCCA GTTCTATTCC CCTCACCACA CTGCTCCAA 120  
 TAAAACTATT TATATACAAA 140

SEQ ID NO:6893  
 20 SEQUENCE LENGTH:163  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08124  
 SEQUENCE DESCRIPTION:  
 25 GATCGTCATC CTTCTGGA GTTCTATCT TCCAAGATGT GACTGTCTGG AGTTCCTTGA 60  
 CTAGGAAGAT GGATGAAAAC AGCAAGCCTG TGGATNGAGA CTACAGGGGA TATGGGAGGC 120  
 AGGGAAGAGG GGTGTTTCT TTAATAAAT CATCATTTGTT AAA 163

SEQ ID NO:6894  
 30 SEQUENCE LENGTH:253  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08125  
 SEQUENCE DESCRIPTION:  
 35 GATCACCTGA GGTCAGGAGT TTGAGACCAG CCTGGCCAAC ATGGTGAAAC GCCATCTCTA 60  
 CTAATAATTGA AAAATTAGCT GGGCATGGTG GCAGGTGCCT GTAATCCCAG CTATTGGGGA 120  
 GGCTGAAGCA GGAGAATCGC TTGAAACAGG AGGCAGAGAT TGCAGTGAGC CGAGNGGGGN 180  
 40 GCCACTGCAC TCCAGCCTGG GCAACAGGAA CAAAACCTCTA TCTCAAAAAA TAAACAAGA 240  
 TTTTCTGCG AAA 253

SEQ ID NO:6895  
 45 SEQUENCE LENGTH:99  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08126  
 SEQUENCE DESCRIPTION:  
 50 GATCACTTGC AGCCCAGNAA GTTTGAGACC ACCCTGACCA ACACAGTGAA ACCCNCTCTC 60  
 TAAAAAAGTT TGTTTTTAAA GTCTCCTTGA AACATCAA 99

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SEQ ID NO:6896

SEQUENCE LENGTH:286

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08127

SEQUENCE DESCRIPTION:

GATCAAGCTA TGCCTGATNC TGCCTTAAGC CTTATNAGGT CGCCACGGAA CCGCAGAAAC 60  
 TCCTGGTGGG CAGAGCTGTG TGTGCCATCT TCATCATTGC ATTACCACCA CCAAGCACAG 120  
 TGCCTGGCAC AAAAGAGTTG CTCAATAAAT AAATCAGGAT GANTGGNTAA ATACATGGNT 180  
 AGGCACTTTG AGCTACAGAT GCGTTTAAAT ACTTTGTGTT TTTCTTAGTC AAACATGTGC 240  
 ANTTANGCAT GTGATAAATG CTATGATGAC CACAANANTG CACAAA 286

SEQ ID NO:6897

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08128

SEQUENCE DESCRIPTION:

GATCATGGTG AAATATTTN GATATATAAA TTCCTTAAGC TATTGTAACC ATGTTTTATT 60  
 GCAAAGATGT AAAATATGCC AGATGTGTGT NAGTTGGAAA TCAAAAAAG NAAAATAAAN 120  
 TATGCAAAGA NTTCAAA 137

SEQ ID NO:6898

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08129

SEQUENCE DESCRIPTION:

GATCCGCAAC AACTCAGCCA TCCACATCCG AGTCTTCAGG GTCACACCCA AGTAATTGAA 60  
 AAGACACTCC TCCACTTATC CGNTCCGTGA TATGGCTCTT CGCATGCTGA GTACTGGACC 120  
 TCGGACCAGA GCCATGTAAG AAAAGGCCTG TTCCCTGGAA GCCCAAAGNA CTCTGAATTG 180  
 AGGGTGGGGG TAATTGTNTG TTGGTNGGCC CAGTTAGTGG GCTTTNNTAA GTGTGTGTAT 240  
 GCGGTCTGTA NCTATTGCCA TATAAATAAA NAATCCTGTT GNACTNGTAN 290

SEQ ID NO:6899

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08130

SEQUENCE DESCRIPTION:

GATCATAAAA CGTTGTAAGT TTTCTAAAAC ACATAAGCTC TCAATAAACG TTAGCTTATC 60  
 ATTGTCACAA A 71

SEQ ID NO:6900

# EP 0 679 716 A1

SEQUENCE LENGTH:211  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08131  
 SEQUENCE DESCRIPTION:  
 GATCAAACAC TGTCAGAATT GCTGAAATCA ATACACAAAG AGATAAAGTT TAGCTTCTTT 60  
 TTACTATTCA ATATTGAACA TAATATTGTT AAATATNGNG ATGAAATGCT GTTGGATNTG 120  
 CTNCATTAAA TCTTAATGTA ATATTGTAAG NCTTTTGAGA ATATACTTGA TTAATAATGTG 180  
 AAAGNNGGGN TTGTTANCTT ATTGCTATNC N 211

SEQ ID NO:6901  
 SEQUENCE LENGTH:81  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08132  
 SEQUENCE DESCRIPTION:  
 GATCATCATC TNCTTGCGGA CTTCTCTGCC TGGTCTTGTG TGTTCGTGA TTCAAACAAT 60  
 AAAANGCTGG TNGAACTTAA A 81

SEQ ID NO:6902  
 SEQUENCE LENGTH:175  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08133  
 SEQUENCE DESCRIPTION:  
 GATCAGACAC TGCCTTTTGT GTGTTTGCTG CCTNTGGATN CTTTTTTAAA AAGACTGTGA 60  
 CATATTAAAA NAGTGTACAT ATATAAATAT NACCTCTTTT GCTGTACAGT TGTGATAGAG 120  
 ACTGAAGNTT TTATTTTNG TGTGCTTTT ATAAGNAAAA ANTTAATACA CTAAN 175

SEQ ID NO:6903  
 SEQUENCE LENGTH:92  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08134  
 SEQUENCE DESCRIPTION:  
 GATCATCTAA TTCTCTGTGG AATAAATACA CACATATATA TTACAAGGGA TAATTAGAC 60  
 CCCATACAAG TTTATAAAGA GTCATTGTGA AA 92

SEQ ID NO:6904  
 SEQUENCE LENGTH:312  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08135  
 SEQUENCE DESCRIPTION:  
 GATCTGGAAA ATACTGGAAA ATGTGATACT TAGAATACTT TGGCTGCTAA GGAAACTTCC 60

55

TCTCCATTGC AGAATAGCTG AGCCAAGTNA GTGAGTTTNC AGAAAGCAGG TGGTGAGCTC 120  
 NTGCCTGCTG GAGGTTGCCA TGGAGGGCCA TTCCTGCCCC GCAACAGCAC CGTCCTGCAG 180  
 5 GAGGCCACTT GGCAGAAGGG TGCAGGGCTG CTGGTGTGAG AGCAAGAGGG CTACAGGGAA 240  
 AGGGCCCTTT CTCAGGGGAT GTNGNTTTT TAAAAGGTTT GGGNACACTT GCGGGGTTTG 300  
 CTAATAATTGA GN 312

SEQ ID NO:6905

SEQUENCE LENGTH:123

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08136

SEQUENCE DESCRIPTION:

10 GATCTCTCTT GCAGCTTGAG AATGTCCCAG TTAAGCCACT TAAAAANTCC TCTNTCCTGC 60  
 AGCCCAACAC TTTNCTAAGA GGTACAGAAA NGANAGGAAA TAAACACAC ATCATTATGG 120  
 AAA 123

20 SEQ ID NO:6906

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08137

25 SEQUENCE DESCRIPTION:

GATCTCAACA CAGACCCTNA CCAGCTGATN AATNCAGTNA ACACACTGGA CAGGGATGTC 60  
 CTCAACCAGC TACACGTACA GCTCATGGAG CTGAGGAGCT GCAAGGNTTA CAAGCAGTGT 120  
 AACCCCGGGA CTCGAAACAT GGACCTGGGG ACTTAAAGAT GGAGGAAGCT ATGAGCAATA 180  
 30 CAGGCAGTTT CAGCGTCGAA AGTGGCCAGA AN 212

SEQ ID NO:6907

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS08138

SEQUENCE DESCRIPTION:

40 GATCAAGCCA AAAGAAATAT TTTNAAATA AGCCCTTTTC AAAAGTTTTT GAATTTATAG 60  
 AAAGCACCAA TGAATAACAT ATTTCTGTTT CGTTAATGTC AGCTGCCTGA ACATTCAGCA 120  
 GTTTATAAAT TGCTTAATTT GTGTNATCTA TTATCCAGTA AACCCATAGT TCCATGATAT 180  
 GTCACAGGNA TTGTNAGGTC CTATTTTAAA GGTACAGTCT TGTGGNATGT CATCN 235

45 SEQ ID NO:6908

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08139

50 SEQUENCE DESCRIPTION:

GATCCTTTGA GCCCAGAAGT TGGAGACCAG CCTGGACAAC ATGACAAAAC CCCATCTCTA 60

# EP 0 679 716 A1

5 CAGAAAATTT AAAAATTGGC CAGGCGTGGT CGCGCACGCT GTAGTCCCAG CTATTCAAAA 120  
 GGCTGAGGTG GGAGGATTAT GTCCCTGGAG CCCAGGAAGT GGNGGTTGCA GNGATTGCAT 180  
 CACTGCATTT NAGCCTGGGT GACAGNGTAC GCCNCTGTAT CAAA 224

10 SEQ ID NO:6909  
 SEQUENCE LENGTH:215  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08140  
 SEQUENCE DESCRIPTION:  
 15 GATCCTGCTG GCCAGAAGCA AGCGGGNCG GCAATAAATC CAAGAAATTG TCCCAACAAC 60  
 CACCAATTCT TACGGAGGAN TATTATTTAG CCAGCAGGAG TCGNGTTTGG TTTACTGCTT 120  
 TTACTGTTTT GNGTTCATGN CTNTTTATTT TAATGGCGTT AAAAGCACAG GCAAATGTCT 180  
 TTGGTAATGC AGCTTAGTAT GANTTCTNTT ANAGN 215

20 SEQ ID NO:6910  
 SEQUENCE LENGTH:253  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08141  
 25 SEQUENCE DESCRIPTION:  
 GATCACAGAC TCTGAAGNCA GACTGGCAAG ATTCAAATCC CGACTGCCAT TTTTAACTGA 60  
 AAGACCTTAG GTAAGTTACC TAACCTCTCT GTACCTGTGT AAAATGGNGA TAACAGTAGT 120  
 ATCCACTTCA CAGAGTTATG AGGNTGAAAT ACATTCATAT TTATAAACG TTTGGACCCA 180  
 GTACTTGGCA CATAGTAAGG CCATGTAAAGT GTTTGTAAAA TAAAACTGNA AATAAAGCCA 240  
 30 TNTCCNAATN AAA 253

35 SEQ ID NO:6911  
 SEQUENCE LENGTH:359  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08142  
 SEQUENCE DESCRIPTION:  
 40 GATCACACTG CTGCAAGACC TGACCAGTTG AGCTTCCGGC GTGGGGAAGT GCTGCGTGTC 60  
 ATNACCACAN TGGATGAGGA CTGGCTCCGC TGTGGGCGGG ATGGCATGGA GGGTCTNGTG 120  
 CCTGTGGGGT ATACCNACCT TGTCTGTAG CCCTGGNGNC CTTTCCTGCG TATGTGTCTC 180  
 CTTCTGTGTA CCTGGGCATG GAATGGCCAG TGAACACCAT CCCAGAAGCA TTTCCCTCT 240  
 GCAAAATGAC GTTCTTCCC ACGTCTGTTT CTGCTAATAT TAAAAATAAA CTTTCCTTCT 300  
 45 TCCCTCCTAT ACCANCTGTA AGGGAAAATN TGCTCTTNTT CCAAATATAT AAAAAGGTN 359

50 SEQ ID NO:6912  
 SEQUENCE LENGTH:49  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08143

55

## SEQUENCE DESCRIPTION:

GATCTTTTAC ATTGCAAACA AAATGCTGTA TTGCTTAAAA GGGTTGAAA

49

5

SEQ ID NO:6913

SEQUENCE LENGTH:30

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS08144

SEQUENCE DESCRIPTION:

GATCAGTTAA TAAACATGAG TAGCTTGAAA

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15

SEQ ID NO:6914

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08145

20

SEQUENCE DESCRIPTION:

GATCTGAACT GTACAAAGTT CTCATAGCAC CNCTGGGAAG AGAAGGACGT AAACAGAACC 60

TGACACCAGC TCCTTTTCCT TNTATACATT ATTTAATACC TATTAAATAC AATTATTTT 120

GGAATAAA 128

25

SEQ ID NO:6915

SEQUENCE LENGTH:425

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS08146

SEQUENCE DESCRIPTION:

GATCTACTTG TAACITGTTG GCCTTCTTCC CACATCTGCC TCANACTGGG GGGGGCTCAG 60

CTCCTCGGGT GATATCTAGC CTGCTTGTA GCTCTAGCAG GGATAAGGAG AGCTGAGATT 120

GGAGGGAATT GTGTTGCTCC TGGAGGGAGC CCAGGCATCA TTAACAAGC CAGTAGGTCA 180

35

CCTGGCTTCC GNGGGCCAAT TCATCTTTCA GACAATCTT AGCAGAAATG GACTCAGGGA 240

AGAGACTCAC ATGCTTTGGT TAGTATCTGT GTTCCGGTG GGTGTAATAG GGGNTTAGCC 300

CCNGAAGGGN CTGAGCTAAA CAGTGTATT ATGGGAAAGG AATGGCATTN CTNGTTTCAA 360

CNAGCGCTAN ATGCAACCAT TNCNCTNTTG TTATAGTATC TAAGGGTNNG NNAGTTAAAC 420

GGTTN 425

40

SEQ ID NO:6916

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

45

TOPOLOGY:linear

CLONE:HUMGS08147

SEQUENCE DESCRIPTION:

GATCCACCAC CCAGCTTCAC CCCTCACCCC CAGCGGCTCA CCATGGGGAT GGCAGCAATA 60

AAATACTTCT AATGGAACAA A 81

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SEQ ID NO:6917  
 SEQUENCE LENGTH:254  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08148  
 SEQUENCE DESCRIPTION:  
 GATCAACAAG CTTNCCACG AATTTAAGAG TTTTATCAAG ATATATCGAA TACTTCTACC 60  
 CATCTGTTCA TAGTTTATGG ACTGATGTTT CAAGNTTGTG TCATTCCTTT GCATATAATT 120  
 AAACCTGGAA CAACATGCAC TAGNTTATG TCAGNAATAT CTGTTGGNTT TCCAAAGGNT 180  
 GTTAACAGAT GANGTTTATG TGCAAAAAAG GGTAAAGATAT AAATNCAAGG AAGNAAAANN 240  
 GTTGNTAGCT AAAN 254

SEQ ID NO:6918  
 SEQUENCE LENGTH:134  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08149  
 SEQUENCE DESCRIPTION:  
 GATCAGAGGA ACCTTAGAGG CCTGAAATTG TTGCTTCCAG TTTAGTGCC CCTCAAATTC 60  
 AAGTGAATAT TTTCCCTTCT CCCTTTACCC TTCTCCAGAA ATAAAGCAGG TGACAGGGTT 120  
 TTNAGAATCT TAAA 134

SEQ ID NO:6919  
 SEQUENCE LENGTH:277  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08150  
 SEQUENCE DESCRIPTION:  
 GATCAAGAGT AATTACCAAC TTAATGTTTT TGCATTGGAC TTTGAGTTAA GNTTATTTTT 60  
 NAAATCCTGA GGACTAGCAT TAATTGACAG CTGACCCAGG TGCTACACAG AAGTGGCTTC 120  
 AGTGAATCTA GGAAGACAGC AGCAGACAGG ATTCCAGGAA CCAGTGTGTTG NTGNGGCTAG 180  
 GNCTGAGGAG CAAGCGAGCA AGCAGAGNAA GAAAAGTTAA ATACCAGNTA AGCTTTTGAT 240  
 TTTTGTATTG TTTGCATCCC CTTGCCCTCA ATAAACN 277

SEQ ID NO:6920  
 SEQUENCE LENGTH:255  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08151  
 SEQUENCE DESCRIPTION:  
 GATCTACCAC CAGAGAGTTC AACTGGNGA AAGNCCTCAT GAGTGCAATN AATGTGGAAG 60  
 ATCCTTTAGC CGAAGCTCCA GCCTCATTCA CCACCGGAGA CTTCACTG GAGAAAGACC 120  
 CTATGCGTGC AGTAAATGTG GGCAGTCATT TAAGCAAAGC TCCAGCTTCA GTTCACATCG 180  
 GAAAGTCCAC ACNNGGGGANN GGCCTTATGT GTGTGGGGNC TNTGGGNANT CCTTTAGCCA 240  
 TAGCTCCANC CTTAN 255

SEQ ID NO:6921  
 SEQUENCE LENGTH:273  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08153  
 SEQUENCE DESCRIPTION:  
 GATCTGGCTT NTCCNGGAGG CTNCCATGGT TGGAGATGG TATCAGAGGG CCTGCCTGGG 60  
 CAGTCTGTCT CCGGGCCAGG GTCAGGGACC CTCTGCCTCT GGCAGCCTTA ACCTGTCCTC 120  
 TGCTAGGACC AGGGTGATTT CAAGCCAGGG AAGCAACTGG GACCCGAAA ACTGTCCCTC 180  
 CCCAGCCCGG TCCNCGTGTA TGTGCCNTGG TCCCCTTGCT GCCATGTGA TGCTGTTGTN 240  
 ATTGCTGTTT GTATATTATC AAAATGTTTT TAN 273

SEQ ID NO:6922  
 SEQUENCE LENGTH:83  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08154  
 SEQUENCE DESCRIPTION:  
 GATCTTCTTT ATAATATTT ATTGTTGAA TCACTTTTAG GATGTAACCT TATAAATAA 60  
 CATGAGCGCT GATGATTTGC AAA 83

SEQ ID NO:6923  
 SEQUENCE LENGTH:207  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08155  
 SEQUENCE DESCRIPTION:  
 GATCCTCATC TCCATCTCA TCCTCTTCT TCACAGCATT TACTTGGAGC TCTTTGTGAC 60  
 ACACCATGTC AGTCATGATG AATCGGCCAA CAGCCAGCCC TTGCCAGCTG ACGTCACAGT 120  
 CTAAGATGGG AAAGTGTGGT ACAGATAGAC ATGAAGAGAG CTTAGCAGTG ATTGAGGTGG 180  
 TGACTAAATA TACAGTCATT GAATAAA 207

SEQ ID NO:6924  
 SEQUENCE LENGTH:199  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08156  
 SEQUENCE DESCRIPTION:  
 GATCACTGTG GGCTGGAGAG GAGAAGGAAA GGGTCTGCGC CANNCTGTCC GTCTTCACCC 60  
 ATANCAAAGC ATACTAGAGC AAAAAACCAG TTGTAATATA AAATGCACTG CCCTACTGTT 120  
 GGTATGACTA CCGTTACCTA CTNTTGTGAT TGTATTACA GCTATGGCCA CTATTATTAA 180  
 AGAGCTGTGT AACATCAAA 199

SEQ ID NO:6925



SEQUENCE LENGTH:358

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

5 CLONE:HUMGS08157

SEQUENCE DESCRIPTION:

GATCATGCAG CAGAAGCAGA AAAAGGCAAA CNAGAAGAAG GAGGAACCCA AGTAGCTTTG 60  
 TGGCTTCGTG TCCAACCCTC TTNCCCTTCG CCTGTNTGCC TGGAGCCAGT CCCACCACGC 120  
 10 TCGCNTTTCC TCCTGTAGTG CTCACAGGTC CCAGCACCGA TGGCATTCCC TTNCCCTGA 180  
 GTCTGCAGCG GGTCCCTTTT GTNCTTCCTT CCCCTCAGGT AGCCTCTCTC CCCCTGGGCC 240  
 ACTCCCGGGG GTGAGGGGGT TACCCNTTCC CAGTGTTTTT AATTCCTGTG GGGCTCACCC 300  
 CAAAGTATTA AAAGTAGCTT TGAATTCCA AAAAAAANGG NNNNNAGGGN GGGGGGGN 358

15 SEQ ID NO:6926

SEQUENCE LENGTH:62

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20 CLONE:HUMGS08158

SEQUENCE DESCRIPTION:

GATCTGTACA TTTACTATC TGTAATAAT TCTCAAAGA ATAAATAAA AAAAAAGCA 60  
 AA 62

25 SEQ ID NO:6927

SEQUENCE LENGTH:51

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS08159

SEQUENCE DESCRIPTION:

GATCAGATAC AGCATTAAAC GTTCTCAGT CTCCTNTCC TCATCTGTAA A 51

35 SEQ ID NO:6928

SEQUENCE LENGTH:259

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS08160

SEQUENCE DESCRIPTION:

GATCTTGCTA AAGTTAAAT AAGGAACATT TCACCTTTTA AATATTTAAT TCTNATGTGG 60  
 ACTTATTTCC AGAAAACTTT GGTGATAATT CTTGAGACAA AAGGTGGTTA AGTAGCATT 120  
 TTATGTAATG CTTATATACC ATAGAGTTTT TAATAGANGA GAAATCCATT TCCTCCGAGG 180  
 GTCACTATTA ACAATGTACT TCCTTAAAT TNGTTAATG ATTGTGATGG GTGCTGCATT 240  
 45 TGCACATTGC ATTANGGAN 259

50 SEQ ID NO:6929

SEQUENCE LENGTH:226

SEQUENCE TYPE:nucleic acid

55 TOPOLOGY:linear

# EP 0 679 716 A1

CLONE:HUMGS08161

SEQUENCE DESCRIPTION:

5 GATCGGATGC TGAATAAAAC TCACCGTGAA GCAAGTCCCA CTGAACGAAA AGTTGGTCGT 60  
AGCATTTNTC AGCAGCTGCT TCCGGCTCCC TGAGACCCAG CCATGGAAGG CATAGAAAGG 120  
CATGTGACAA GAAACTCATG GCTTTTAATC CTGGCAGGNC AAGGAAAACC CCGTCAAAGN 180  
TTTGATAAN TTTTGCTGCT CTCCTGCTGG GGGGGGNNNG NNNNNN 226

SEQ ID NO:6930

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SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08162

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SEQUENCE DESCRIPTION:

GATCGTTCTT GATTTTGTTC TCATTAGTGT CATTCTTTG TCATTGAGGA CTTTCCCT 60  
TACAACAGTA ACACCATTTT TTGAAGAGCA AACTTATAA TACCTCCTGG GATTGTNAGC 120  
TAGTCATTCA GCCTGTGTAA CCATGTGGAA ATAAAAATTG ACGACCAATG TATTATATGG 180  
ACAACTTTTG CTTTGAGTAA TAAACTTGAT TGTAGGAAA 219

20

SEQ ID NO:6931

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

25

TOPOLOGY:linear

CLONE:HUMGS08163

SEQUENCE DESCRIPTION:

GATCCACCC ATTCTTTCAC TTAAAGAAA AACAAATAAT TGTTGCAGAG GTGTCTGTAT 60  
TTTGAGCTG CCTTTTGTGA AGANGCACTT TTCCCAAATA AAACAATTAA A 111

30

SEQ ID NO:6932

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

35

TOPOLOGY:linear

CLONE:HUMGS08164

SEQUENCE DESCRIPTION:

GATCATTGA AATNTCTGGG AGTCTGAGG GTACTGACAT AATNACCTGC TGGAGTCTGT 60  
AAATACACAT TTAAGACAGT GAGGATGTGA ATAAATATAT TAATGCAAA 109

40

SEQ ID NO:6933

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

45

TOPOLOGY:linear

CLONE:HUMGS08165

SEQUENCE DESCRIPTION:

GATCAAATAG AGCCCTGTCC AGGTAGAAAA GAAATGGTAT GTAGAGCTTA GATGTCCCTA 60  
TTGTGACAGA GCCATGGTGT GTTTGTNNTA ATAAANCCAA AGAAACATAA A 111

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EP 0 679 716 A1

5 SEQ ID NO:6934  
SEQUENCE LENGTH:243  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08166  
SEQUENCE DESCRIPTION:  
GATCCCAGCT GTTCTAGGCA GGGCCAGGCA GAGTGGGGCG CAGGCCCTNG AAGGGCGAGA 60  
10 CCCAGTGGCT GGGCTGCCCA GGGCTGAGGG GCCGCCTCTT GAGGGTACAC GCCTCTGGTC 120  
ACATGGCCAT GGAGCCTTGG GTACCCCTGA GTTAAGGGAG GACATTGGC CAGCTGGTGG 180  
CTGGGAGGGG AGCCTGGCTG CCCTGCTGCT TCTCCTGCCT AATAAACAGG CTTCTCCTGC 240  
AAA 243

15 SEQ ID NO:6935  
SEQUENCE LENGTH:124  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08167  
20 SEQUENCE DESCRIPTION:  
GATCTATTTT NATAGGTTCT TTTTCAGAAG TAAAATTTTG TACATATATA CATGTACATA 60  
TCTNTTGTAGT TTGGGTTCAT TTCTATAACA TTTTGTGAAGA AAATAAAAGT TFGAGCACCT 120  
GAAA 124

25 SEQ ID NO:6936  
SEQUENCE LENGTH:169  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
30 CLONE:HUMGS08168  
SEQUENCE DESCRIPTION:  
GATCAGTTGT ATGTAAATGT ACATTTTTGT NACTTTGGCT GTGCCCCTTA GAATTTATCT 60  
TCCATAAAGT ATTTCTCCCA TTGAGTCTAA TGATGTATAC TTTGCCTAGG TCTTTCCAAA 120  
35 ATTAATTTA TGTAATGTC TATTTTATAT AAAATATGNT TAAAATAAA 169

40 SEQ ID NO:6937  
SEQUENCE LENGTH:314  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08169  
SEQUENCE DESCRIPTION:  
GATCACATTT AGGAGCAAGC AGGTGAGGGC AGAGGTGCTG GAGTGAACGT CGGCTCTTTG 60  
45 GCTGCTAGCC TTACCCACTG AGGGAGAGGA GCTGAAACAT GAAATGGGGA TGGGTGANCA 120  
ATGCTCTCCT TTTGCAGAGC TGTATTGACT TGTTCAGAA TAACTGATAT GCCTTCACTC 180  
AGAAGAAAAG AAATGAATGT GAAAGAAAGC CAAGCATCNN TTTGCACTTA AATCANTTAC 240  
CACGGAAGNT ATATTAGCT TCAACTTTAG TTAAAAATTA TGTGAATTAA ATATTTTGAT 300  
50 TTCCCTGGGN NAAA 314

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5 SEQ ID NO:6938  
 SEQUENCE LENGTH:46  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08170  
 SEQUENCE DESCRIPTION:  
 GATCAAGTGA CTGTTTAATA AATNAGTTGC TTGGGTAGAA TGGAAA 46

10 SEQ ID NO:6939  
 SEQUENCE LENGTH:21  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS08172  
 SEQUENCE DESCRIPTION:  
 GATCTTGCTG AAAACCAGAA A 21

20 SEQ ID NO:6940  
 SEQUENCE LENGTH:85  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08173  
 25 SEQUENCE DESCRIPTION:  
 GATCAACAAT CATCACCTGC CTTTGTAGA AAAGAAAAAC AAAAAAGTA AATAAAATT 60  
 TTAAACAGTA AAATAAAAGT TTAAA 85

30 SEQ ID NO:6941  
 SEQUENCE LENGTH:274  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08174  
 35 SEQUENCE DESCRIPTION:  
 GATCACTACT GCAGCAGAAT GGTCTATGTN ATTTTCCTTC TTTGGTTTT NCCTGACTTA 60  
 CATTCGTAAT TTTAAGAAAA TTTCTTTACG GGTGGAAGCC AATTACATG GATTAAACCT 120  
 CTATGACACT GCACCTTGCC CTATTAACAA TGAACGAACA CGGCTACTTT CCAGAGATAT 180  
 TTNATGAAAG GATAAAATAT TTCTGTAATG ATTATGATTC TCAGGGATTG GGGNAAGGTT 240  
 40 CACAGNAGTT GCTTATTCTN CTCTGTAATT TTAN 274

45 SEQ ID NO:6942  
 SEQUENCE LENGTH:246  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08175  
 SEQUENCE DESCRIPTION:  
 50 GATCTAAGTT GGGCAAAGA GAGTCATCCT GTTACCTTAA AAAGGAGTCT AGGGTGAGCC 60  
 CCAGTCTGCT GGTGGCCATC TTCACCACCT TTGGGGAGAG ATGGCCTCNG CAGACACACA 120

55

AAGCAAAGAG GTGGAGAGAA ACTGTGTCTT TGTGTCATTG TTTGAGTCCC TGGACCCAGC 180  
 CCAGTCCCCC CGACTACGCT GANCTTTTCA ATTGTGGGGG GCAATAAATT CCATTAGTT 240  
 ANGAAA 246

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SEQ ID NO:6943  
 SEQUENCE LENGTH:215  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS08176  
 SEQUENCE DESCRIPTION:  
 GATCCACATN ATACCGGTGC TGAAGACCTG CAAGTNATTT TGGAAAAGGG CTGGTGCGGA 60  
 TGGAAAGGGCC CAGATTTTGG GAACAAGGAT GCATACTATA ACTTATGTCT TCCTCAGCGA 120  
 CCAAATATGA TTTAAATAT CTTGGAGTCA AAGACTGCAG TAGAGTGGTA TTATAAATTT 180  
 NTGAATAAAG AATCAGTTA NTTTTTCACA TTAAT 215

15

SEQ ID NO:6944  
 SEQUENCE LENGTH:171  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08177

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SEQUENCE DESCRIPTION:  
 GATCTGGACA CGAGCAGTCC CTGAGGGGCG GGGTCCCTGG CGTGAGGCC CCGTNACAGC 60  
 CCACCCTGGG GTGGGTATTG TGGGCACTGC TGCTCTGCTA GGGAGAAGCC TGTGTGGGGC 120  
 ACACCTCTTC AAGGGAGCGT GAACTTTATA AATAAATCAG TTCTGTTTAA A 171

25

SEQ ID NO:6945  
 SEQUENCE LENGTH:161  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08178

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SEQUENCE DESCRIPTION:  
 GATCGGCCCC GGAAAAAGTC TGCCCCAGAA ACTCTCACAC TTCCAGACCC TGAGAAAAAA 60  
 GCCACCCTGA ATTTACCCGG CATGCACTCT TCAGATAAGC CATGTCGGCC CAAATCTGAG 120  
 TAACTTTATA TAANTATCTC ATGGGGTTTT ATATTTTCAA A 161

35

SEQ ID NO:6946  
 SEQUENCE LENGTH:251  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08179

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SEQUENCE DESCRIPTION:  
 GATCCTTGGG GAAGGTTTCA GTTGCCTGT ATGCTGTTGG ATTTGCCAAG TCTTTGTATA 60  
 ACATAATCAT GTTTCCAAAG CACTTCTGGT GACACTTGTC ATCCAGTGT AGTTTGCAAG 120  
 TAATTTGCTT TCTGAGATAG AATATCTGGC AGAAGTGTGA AACTGTATTG CATGCTGCGG 180  
 CCTGTGCAAG GAACACTTCC ACATGTGAGT TTTACACAAC AACAAATGAA AATAAATTTT 240

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AATTTTATAA A

251

SEQ ID NO:6947

SEQUENCE LENGTH:277

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08180

SEQUENCE DESCRIPTION:

GATCCCTCTT GGTGTGAGTT TTCTGACCCA ACCAGCCTCT GGTTAGCATC ATTTGTACAT 60  
 TTAAACCTGT AAATAGTTGT TACAAAGCAA AGAGATTATT TATTCCATC CAAAGCTCTT 120  
 TTGAACACCC CCCNCACTT ANTCCNTNGT TCAGGCCGAT GNGCTTGCTT TCCTTCANCC 180  
 TGTGTTGTTT CTTATTTAGG NCTATTTATT ANTGGTTGGN CCAATGTACT CACAGCTGTT 240  
 GCGTCGAGCA GTCCTTNGTG AAANTNCTGT ATAANTN 277

SEQ ID NO:6948

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08181

SEQUENCE DESCRIPTION:

GATCAGCTT CAGCTGCACA CCTNTGTCCC CTTGGATGGG GNACTAAGGG NAAACGTCTG 60  
 TTGTATCACT GAAGTTTTT GTTTGTTC NATACGTGTC TGCATAAAAA TGCCAAAGTT 120  
 TTTTTTCAAA 130

SEQ ID NO:6949

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08182

SEQUENCE DESCRIPTION:

GATCACCAAT NNTNNCTTTG AGCCAGCCAA CCAGATGGNG AAATATGACC CTCGCCATGG 60  
 TAAATACATG GCTTGCTGCC TGTAATACCG TGGTGACGTG N 101

SEQ ID NO:6950

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08184

SEQUENCE DESCRIPTION:

GATCATGAAG ACCTGCTTTA GCCCCAACAG AGTGATTGGA CTCTCAAGTG ACTTGCAGCA 60  
 AGTAGGAGGG GCATCAGCTC GCATCCAGGA TGCCCTGAGT ACAGTGTTC AATATGCAGA 120  
 GGATGTACTG TCTGGAAGG TGTCAGCTGA CAATACTGTG GGCCGCTTCC TGATGAGCCT 180  
 GGTTAACCAA GTACCGAAAA TAGTTCCCGA TGACTTTNAG ACCATGCTCA ACAGCAACAT 240  
 CAATGACCTT TTGATGGTGA CCTACCTGGC CAACCTCACA CAGTCACAGA TTGCACTCAA 300  
 TGAN 304

EP 0 679 716 A1

SEQ ID NO:6951  
SEQUENCE LENGTH:268  
SEQUENCE TYPE:nucleic acid  
5 TOPOLOGY:linear  
CLONE:HUMGS08185  
SEQUENCE DESCRIPTION:  
GATCCTATCT GTNCTGGCAG GACTGGCAGN CATGGTGGGC TACGCCTTGC TCAGNGGCAT 60  
10 TGTCTCCATN CAGNGGGCAA CGCTGCTCGG GCCCCAGGCA CCCGGACCCT GGGCATGGCT 120  
GAGGAGGATG AAGAGGAATN ATTTGTCCTC ACGCTCCCAA GACTGGTTTT TNTACTCTNA 180  
TGCATTCCAG NGGCCCCCGT GCCTCCTCGT TGTGGTACA GCCGGACACG GGGTGCTGCC 240  
ACCCAGAATA AAGCCACTCA CACTGAAA 268

15 SEQ ID NO:6952  
SEQUENCE LENGTH:152  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08186  
20 SEQUENCE DESCRIPTION:  
GATCCCACCG AAGCAGCGTG TCCTCCGTGG GAGCCCGAGG TGGGTCCCAC CCGCATCTCC 60  
TCTTCCACAC CCTCCTGGGA CCCCAGCCCT GGAGAAGTAG CTCTGGCTTG TTTCTTTTT 120  
NATTAAAGAT AATTTATGTA TCGACTAAGA AA 152

25 SEQ ID NO:6953  
SEQUENCE LENGTH:72  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
30 CLONE:HUMGS08188  
SEQUENCE DESCRIPTION:  
GATCAGTGGG TCTAAGTNTC CGAGACTTAA CGAAAATAGT ATTTAGCTG CAATAAAGAT 60  
TGAGTTTGCA AA 72

35 SEQ ID NO:6954  
SEQUENCE LENGTH:293  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
40 CLONE:HUMGS08189  
SEQUENCE DESCRIPTION:  
GATCAGCATC CTNCGNTGCC CCTTAGCAAC TNAGGTGGTT GATTGAAAC TGTGAAGGTG 60  
TGATTTTTTC AGGAGCTGGA AGTCTTAGAA AAGCCTNGTA AATGCCTATA TTGTGGGCTT 120  
45 TTAACGTATT TAAGGGACCA CTTAAGACGA GATTAGATGG GCTCTTCTGG ATTTGTNCCT 180  
CATTGTGAC AGGTGTCTTG TGATTGANAA TCATGAGCGA AGTGAAATTG CNTTGANTTT 240  
CAAGGGAATT TAGTATGTNA ATCGTGCCCTT NGAAACANGG GGGNAAAAAN ATN 293

50 SEQ ID NO:6955

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SEQUENCE LENGTH:184

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08190

SEQUENCE DESCRIPTION:

GATCCTTCAA TAAAAATCA ATGTGTGAAG GTTCCTAGGC ATAAAAGGAA GTTCAGAAGG 60  
 NTATGTAGGA AATACTGTTG TCTCTCTGGG GATTGGGATT ACAGGGATTT TTTCCTCTTT 120  
 NCTTTTGTGTT AAGTTTGTGT TTCCTAAAGT TTCTGCAATA AACGTACGAT GCTTGTATAA 180  
 TAAA 184

SEQ ID NO:6956

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08191

SEQUENCE DESCRIPTION:

GATCTTGAAT TTCTACATAA CTTTCTCAGT TTATATGCCC TGTGGCAAGT GCAGCAAGCA 60  
 CTGTTTCCTG TTTCTAAACT TGTAGAAAAT CATCCATACA TCTTACAGTT GTCAGTTTTA 120  
 ACCAGATAAC AGTGGCACTT TGTGCTGCT TTTTATCTT TAGCTTAGGT TAACAGGACC 180  
 CTGGAAGTAA AGTTGTTGAT TTATTCAATA GAGTATTCTC AATTAATTTG GCTAGATTTC 240  
 TACATGATTC AAANTCTAAA AANGTAGACA TGCATGCTTA CATGTCTAAG GCCTGAAAAA 300  
 TTGGNGGGGN CATCCCAAAA TAAATGN 327

SEQ ID NO:6957

SEQUENCE LENGTH:22

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08192

SEQUENCE DESCRIPTION:

GATCTAAGTG GTGGTATGGA AA 22

SEQ ID NO:6958

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08193

SEQUENCE DESCRIPTION:

GATCTGTTGA CAATGGAGCA AGTGAAAGAC TTTGCTGCTA ATGTGTATGA AGCTTTTAGT 60  
 ACCCCTCAGC AACTGGAGAA ATGATTTTCC CTTCAAGAAA AACTACAGTG GGATTCATTT 120  
 ACTTTTAAAA ATACACTGGG TAAATCACCT ATACTTAGAG TAACAGTTTG TTATCAAAAT 180  
 GCCTGNTAAA ATATATNCTT AATAAANGTC TTCATTTTCAT AAA 223

SEQ ID NO:6959

SEQUENCE LENGTH:331

SEQUENCE TYPE:nucleic acid



TOPOLOGY:linear

CLONE:HUMGS08194

SEQUENCE DESCRIPTION:

5 GATCTTACTT GCGAAATGCG ATGGTTGCTG GGAATACCTG AAAGTGTGGA TTATATTGCT 60  
 TGACTTCTAC CTCAGAACTCT NCTTTGTTTC ATGACTTAAT AGTGCTTTAA GTNNGGTATA 120  
 TNATTTNACC NCTAGGAATT CTNTGTTTTA CACAGAAATA AAAATTTTAA AATAGAAAAT 180  
 GCTTTTACTT TGTAAGGTAA GNGAGTATCC ATATGCTTAG ATGTGCTCGT TTCTAAAATN 240  
 10 CTAGNGGTTG CTATANTCAG CTCATGGAAT GCACAGCTAT TGCTTTTGT GNTAGATTGT 300  
 ACATAAACAT CAGCAGNTGN AAGGGNAAAT N 331

SEQ ID NO:6960

SEQUENCE LENGTH:211

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08195

SEQUENCE DESCRIPTION:

20 GATCACCCAG ATGCAGTGAA GCTTTTNACC CGCCAGCTTT TGGAAGTCCA TCAGGGACAA 60  
 GGCCTAGATA TTTACTGGAG GGCTAATTAC ACTTGTCCTA CTGAAGAAGA ATATAAGCT 120  
 ATGGTGCTGC AGAAAACAGG TGGACTGTTT GGATTAGCAG TAGGTCTCAT GCAGTTGTTC 180  
 TCTGATTACA AAGAAGNTTT AAAACCGCAA A 211

25 SEQ ID NO:6961

SEQUENCE LENGTH:208

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08196

30 SEQUENCE DESCRIPTION:

GATCATTGTA GATGAAGTGA AGCAAGAAGT TATCAGTACC AGCAGCAAGG CAGANCCNCC 60  
 CCAGTGACCC TCCCTGGCCT GGTCTGNTGA TGGCCAGACT CTGTTTGCTG GCTACACGGA 120  
 CAACCTGGTG CGAGTGTGGC AGGTGACCAT TGGCACACGC TCGAAGTTTN TGGCAGAGCT 180  
 35 TTNCAACTAA ANAANAANCT GGCATAAA 208

SEQ ID NO:6962

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS08197

SEQUENCE DESCRIPTION:

GATCCCAGCC CCTAGGTGGG CAGAGGCAGA CCCTCCCCAG AGCTCCTTAG GAAGAAGACA 60  
 GACTGGTTCA TTGAATGCCG CCTTATTTAT TTCTGGTGAG GATGCATGCC TGGGGCTGCT 120  
 45 GGTGTTTAGA GTGGGGGCTA CCCTTNTAAA TCACTGCTAC TCAAA 165

SEQ ID NO:6963

SEQUENCE LENGTH:280

50 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS08198

SEQUENCE DESCRIPTION:

5 GATCACTCTN GGTCACTNC TCTTCTTTA TCTNTCTTC TCCTTTTTTA AGAAAACGAG 60  
 TTAAGTTTAA CAGTTTTGCA TTACAGGCTT GTGATTCATG CTTACTGTAA AGTGGAAGTT 120  
 GANCTTATTT TAAAACCTCA AGCTCAGTAA TTTGAAACAC TGNAACATTC ATCTAGGNCA 180  
 TAATAACAAA GTTCAGTATT GACCATAACT GTTAAACAA TTTTAAGCTT TCCTCAAGTT 240  
 10 AGTTNTGTTG TAGGNGTGA CCTAAGCAGG TAAGCGTANA 280

SEQ ID NO:6964

SEQUENCE LENGTH:51

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS08199

SEQUENCE DESCRIPTION:

GATCCATATA TGTGTGCATG TCATGAAATA AAAGNATCAC ACANCACAAA A 51

20 SEQ ID NO:6965

SEQUENCE LENGTH:155

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS08200

SEQUENCE DESCRIPTION:

GATCTTGGAG CTTCCCTGTA GCCCACCTTC CCCGTGCTTC ATGTTTGTAG AGGAACCTTG 60  
 TGCCGGCCAG GCCCAGTTTC CTTGTGTGAT AACTAATGT ATTTGCTTTT TTGGAAATA 120  
 30 GAGAAAATCA ATAAATTGCT AGTGTTCCTT TGAAA 155

SEQ ID NO:6966

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS08201

SEQUENCE DESCRIPTION:

GATCCAGCAT TGGGGCCACT AACTCCAGC CTGGACCACG GAGCGAGACT GTCTCAAA 58

40 SEQ ID NO:6967

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

45 CLONE:HUMGS08202

SEQUENCE DESCRIPTION:

GATCAGGCTT CAGGATAGCC CAGCACTGAG GACATCTAAA ACAGTCTTCA TTTATTTATT 60  
 TATTGTTTAT AGTGTCCAAA AGTTGGAATT AAAGTGAATG GCTGAATCAA A 111

50 SEQ ID NO:6968

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SEQUENCE LENGTH:39  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08203  
 SEQUENCE DESCRIPTION:  
 GATCATGACA AAGAAGATTA AAATTCATT AGCATGAAA 39

SEQ ID NO:6969  
 SEQUENCE LENGTH:90  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08204  
 SEQUENCE DESCRIPTION:  
 GATCAATTGT ACCCCATACC TCAGCATCAT GCAATATAAC CATTAAAGAGA CCTGCACATG 60  
 TATTCCCTGA ATTTAAAAATA AAAGTTGAAA 90

SEQ ID NO:6970  
 SEQUENCE LENGTH:315  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08205  
 SEQUENCE DESCRIPTION:  
 GATCATTGCA GTCTCTGGCT TTTTNACTCC AGGCGGGCTC CGTGCCCTCC GGGGCCTCTT 60  
 CTTCCCTTGTN AGGCCAGTGG GAGCCACAGA GGCCTCATTG GCTTCCTATG AATATNAAAT 120  
 GGGATTCTCT GTGGGGGAAG CTTCCATAAG GCAGGAAGGG GTCCCGGTT GTTGGCTATN 180  
 AGTGTTATTT NCTTTTAAAT CATCTGTGCT CCTTCAAAGA CGACGTAAGA AGCTTGTGCC 240  
 CTGGCGTTGC AGAAATCTCT GGCTGTAGGG ATTAAACCTA CATGTCTTCC TGATGGGGTG 300  
 GTGAGGACGT AAACN 315

SEQ ID NO:6971  
 SEQUENCE LENGTH:262  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08206  
 SEQUENCE DESCRIPTION:  
 GATCACCTGA GGTGAGGAGT TCACGACCAG CCTGGCCAAC ATGGTGAAAC CTTCTCTAC 60  
 TGAATAATACA AAAATTAGCC AGGTGTGGTG GCGCATACCT GTAGTCCCAG CTACTTGGGA 120  
 GGCTGNGGCA GGNGAATCAC TTGAACTCGG GAGGCGAAGG TTGCAGTGAG CCGAGATTTC 180  
 ACCAGTGCAC TCCAGCCTGG GTGACAGAGC AAGACTCCAT CTCAAAAAAA ANNTAATTAN 240  
 AAAAAATTGC AGCTGCNGGA AA 262

SEQ ID NO:6972  
 SEQUENCE LENGTH:118  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS08207

SEQUENCE DESCRIPTION:

5 GATCTTGCAG GTCTAGTATT TNAATAATGC ACTATTACCC AGGGCAGNTA TTATGAGAAA 60  
CTGTTTCTNC TCTAAGGGTT TATGGCAGAC TTTGCTTTT NAACATGTGA GANATGAN 118

SEQ ID NO:6973

SEQUENCE LENGTH:152

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08208

SEQUENCE DESCRIPTION:

15 GATCTGAGTA TTCCCAAGG GCACTCAGCC ACAGGGNTGA ACTAGTGTTC GTTGTATCC 60  
TTGCAGTTAT GTGACTTAAA GTGACTCAGA GATATCTATG TATGCNNGTG TACTCCGCTG 120  
GCAATGAAGT AAATATATCA ATTTGTGGNA AA 152

SEQ ID NO:6974

SEQUENCE LENGTH:297

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08209

SEQUENCE DESCRIPTION:

25 GATCCTCCTG CTTTGGCCTC CCAAAATGCT GGGNTTATAG GCATGAGCCG CTGCACTTGG 60  
CCTGNTACTG ATTTTAATNN CTTGCGTTAT CACATAGTGT TGTATTGAA ACATAGTTCA 120  
TGGTTTTATC AAAGAACTGA AGNTGAGAAT ACTGGTCATC TAACTTTGTA ATTTGATTTG 180  
ATTATACTGT AAAGTTTGAC AGTCTCATTT TATCACTGCG TTTGTATCTA TNACTAAANT 240  
GTATTNTTTG ACCTCTTACT GATTCATTGT TGGTNTGTNC AAAGTGTGA CTNGNTN 297

SEQ ID NO:6975

SEQUENCE LENGTH:301

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08210

SEQUENCE DESCRIPTION:

40 GATCCTGTCA CCCAGGTAGT GAGTATAGCA CCCAGTGAAA CTGTAGTCTC ATNCCAGGCA 60  
CTGTGCTAGC CCACTCTGGG TCATTTAATC CTCTCCTAAG AAGAGAGGAG ACACAGCGTC 120  
CCCAITTGAC AGATGCAGAA AGAGGTTCCA CAGGTGTGCN TTGATTCTNT CCTAAAACCG 180  
TTTCCCGGAA GCTTTTCCTG GTGTGGGCGC TTCTAACCTA ATCCTCAATC GNTTCCAGNA 240  
CTATTACTCT GTTCCACAG TGNTACTGTG TCTAGGTTTT ANGGGCGGCA AGTTCNATTT 300  
N 301

45 SEQ ID NO:6976

SEQUENCE LENGTH:264

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50 CLONE:HUMGS08211

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## SEQUENCE DESCRIPTION:

GATCCTTCCG ACTTGGCCTC CCAAAGTGTT GGGATTACAG GCATTAGCTA CCACACCTGN 60  
 CCAAGGCCCA GGTTCGACA GAAAGGGAGA GAAAACCTGC CAGAGATGCC ATTCGGAGC 120  
 CACTCTGCTT GGCAGGGACC TGTGTTCCCC TCATGCAGGT TCATCCTTAG AGGGCTGCCG 180  
 TCTTATCTGG TTGTGCAAAA GTCCACAAC CTTTCTGGAT TGATAGTTTG TGGTGAANNT 240  
 AAACAATTTT AGTTTGTGTTG GAAA 264

SEQ ID NO:6977

SEQUENCE LENGTH:318

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08212

## SEQUENCE DESCRIPTION:

GATCAGAACT ACAATTACAA CCAGCATGCG TATCCCACTG CCTATGGTGG GAAGTACTCA 60  
 GTCAAGACCC CTGCAAAGGG GGGAGTCTCA CTTCTTCCT CGGCTTCCCG GGTGCAACCT 120  
 GGCCTGATGN AGTGGGTGAA GTTTTGGTAG GCAATTTCTT GCAACCACCA CCGNGGCCCC 180  
 GNAAGCACT GGTGCTNAGG GAGCTCCTNN CTTGGCCCN CACGCCTGTG CCAGCCCTGG 240  
 NCCCGNCTGC CACACCTCTG TTTCTANGG CTGGGGACNC AGATTGTNTC TCCTNTTTC 300  
 TTNCNACTGC AATGTGCN 318

SEQ ID NO:6978

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08213

## SEQUENCE DESCRIPTION:

GATCATNCTG CCCCATNTCC ACGCACCCAA AACCAGCCCT CTCGCTTCTA ACACAGGGCA 60  
 CCTGCTGGGG CTCAGGGATG TTAGGGACGA GTTCCAGNCC TGCCACTNCC CTNGGGCGAC 120  
 CCCTCNCTGT CCCTGCCTCC CTGCTCTGCC GCCCCTNTTN CTGGAN 166

SEQ ID NO:6979

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08214

## SEQUENCE DESCRIPTION:

GATCCGATAC AGATTACATT TCTTGCCAGA GAGTGTGCT GTTGTTTCTT TAGGTAAGTG 60  
 TGTATTGGTG ATTCCATAAT AAAAGCAGTA ACAATAACTA CCAA 105

SEQ ID NO:6980

SEQUENCE LENGTH:233

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08215

## SEQUENCE DESCRIPTION:

5 GATCAGATAC ATGAACATGT CTTACATGGG TTGCTGTATT TAGAATTATA AACATTTTTC 60  
 ATTATTGGAA AGTGTAACGN GGACCTTCTG CATACTGTG TAGAACCAAA ACCACCATGA 120  
 CACAGTTTTT ATAGTGTCTG TATATTGTN ATGCAATGGT CTTGTAAAGG TTTTAAATGN 180  
 AAACACCAT TAGCCAGTCT TTCTTACTGA CANTAAATTA TTAATAAANT AAA 233

10 SEQ ID NO:6981  
 SEQUENCE LENGTH:72  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08216  
 SEQUENCE DESCRIPTION:  
 15 GATCTTTCCA GAGGTCCATG GTGGAAGACG ATAACCCTGT GAAATACTTT ATAAATNTC 60  
 TTAATGTTCA AA 72

20 SEQ ID NO:6982  
 SEQUENCE LENGTH:58  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08217  
 SEQUENCE DESCRIPTION:  
 25 GATCACCCAT CTGTGTGCTT CCATCCTGCA TTAATTTCA CTCAGTGTGG CCCAGAAA 58

30 SEQ ID NO:6983  
 SEQUENCE LENGTH:280  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08218  
 SEQUENCE DESCRIPTION:  
 35 GATCTCCAAC AGCCAGTGTG TGTTTCCCAT CTCTGTAGG TTCCATCAAT GGTGAGCACC 60  
 AGCCTGAATG CAGAAGCGCT CCAGTATCTC CAAGGGTACC TTCAGGCAGC CAGTGTGACA 120  
 CTGCTTTAAA CTGCATTTT CTAATGGGCT AAACCCAGAT GGTTTCCTAG GAAATCACAG 180  
 GCTTCTGAGC ACAGCTGCAT TAAANCAAG GAAGTTCTCC TTTTGAACCT GTCACGGATT 240  
 CCATCTTGTA AAGGATATTA AATGTTGCTT TAACCTGAAA 280

40 SEQ ID NO:6984  
 SEQUENCE LENGTH:311  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08219  
 SEQUENCE DESCRIPTION:  
 45 GATCCAGAGA CTCGTGCTGT CTCTTTGTCC CTTTCCTGAT GGTGTTACTT CGATTAATA 60  
 CTTGAGCTTG GTGTAAAAAT TGCCAAAGCA GTTGCTGCCC ACAACTTTGT AAAAGCCAAA 120  
 AAGGAGGTTG AAAATTCACA GGCTGCCCCG AAAAAGANGA AACTTGCAAT GGGGTTTGAA 180  
 GCAAAGNNGN GATGGGAAAC CNAAGCAAC ATGGGNTACA TGTAACCTGC CAGAGTGCTT 240  
 50 CAAGACATTT GTAGCCTCAA ATGCTCAAAT TTANTGNGAA TGTTTCCTG CCTATGTTCA 300

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TATGTCAGGT N

311

SEQ ID NO:6985

SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08220

SEQUENCE DESCRIPTION:

GATCTGATGG TTTTATAAAG GGGNGTTCTG CTGCATACAC TCTGTCTTGC CTGCTGNCAT 60  
 GCAAGATGTG ACTTAGCTCC TCCTTTACCT TCCACCATGN TTGTNAGGCC TCCCAGCCA 120  
 TGTGGAAC TGAGTTGANT AAACCTCTTT CCTTTATAAA 160

SEQ ID NO:6986

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08221

SEQUENCE DESCRIPTION:

GATCAAAAGA TAACTGCTTA TNATAGTAAG ATAACCTTGG AACAGAACTG TGATTAAAAA 60  
 CCTGAATAAT AAAAAACACA CAAGACCCAT TAAACCTAT TCCTCACTTT TAAAA 115

SEQ ID NO:6987

SEQUENCE LENGTH:331

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08222

SEQUENCE DESCRIPTION:

GATCCAGTTG GATATAGTAA CCACTGCCGA CTNCTGGAT GTGCTAACTC ACACCAAGCC 60  
 CTCCGNAAG AATCTGGCTC AGAGATACTC AGACTGGCAA AGAGAATTCG AGTCTGTCTG 120  
 AAACCACATT TACCCTGACC TGGCCACAAA GGCAACCACA AAGACCTCCT AGTTTATTAN 180  
 NGNCGTGGG AGAACAAAAT GATTGGAATG GAAAAGAGAA AATTATTTT GANGACTGGA 240  
 TTAAC TTGAG CCACTGTATT GTTTGGNTA GCTGAGATAT ATTTNTTAAC TTTACCATT 300  
 TCGATGTCAG CAAAATATTG AGAGTTTCTT N 331

SEQ ID NO:6988

SEQUENCE LENGTH:121

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08223

SEQUENCE DESCRIPTION:

GATCTACTCC CAGTTTTTAA CTTTNNACAG AATATTGTTG CTTTCCTACA ACAATGTACA 60  
 TATATTNCA GTGTATATG CTTTTTTTTT TNCCAAATAA AGTTTGAGTT CTAAACTCAA 120  
 A 121

SEQ ID NO:6989

SEQUENCE LENGTH:151  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 5 CLONE:HUMGS08224  
 SEQUENCE DESCRIPTION:  
 GATCCTTCCC TGGCTCTCAC CTGCTCCTTT AGGCTGTAAT TGCTTCCTAC ACACGAAGCC 60  
 TCTGATTGGA GCCTCTGGTN CATCTCAGAA AAACCTTCCA AGAGCGCTGG GGTTTATGCT 120  
 10 TTCTGAATAA AACTACTGT TTACATGGAA A 151

SEQ ID NO:6990  
 SEQUENCE LENGTH:119  
 SEQUENCE TYPE:nucleic acid  
 15 TOPOLOGY:linear  
 CLONE:HUMGS08225  
 SEQUENCE DESCRIPTION:  
 GATCTCCATA ATTTAAGAT ACTCTATGTT AAACCTTTT TNAAGTNCCT TTTTACATC 60  
 ACGTCTGAAA TGCACGAGNG TGGCGGTTTC TGTTTCACTG GTTTNNTTGT TCATTTTNN 119  
 20

SEQ ID NO:6991  
 SEQUENCE LENGTH:116  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS08226  
 SEQUENCE DESCRIPTION:  
 GATCCCGGGC CGTTATCCAT CTGGAGGCTG CAGGGTCCTT GGGGTAACAG GGACCACAGA 60  
 CCCCTCACCA CTCACAGATT CCTCACACTG GGGAAATAAA GCCATTTTCA AGGAAA 116  
 30

SEQ ID NO:6992  
 SEQUENCE LENGTH:207  
 SEQUENCE TYPE:nucleic acid  
 35 TOPOLOGY:linear  
 CLONE:HUMGS08227  
 SEQUENCE DESCRIPTION:  
 GATCCGCTGG GACAGAGTGC CCACCGTCGT GTCTTTNATA TCTCTGTAAT AACCCACAGT 60  
 TAAAAAGGGC AGGAAAAGGC ATCAGGGTAC CATGTTATCA GGCAAGTTCT TACATTCTAA 120  
 40 GAAAATTCCT AGCTTTGTTG GGTGAGGCAA GTTTTAAAN GAANAATGTC ACTTCCCAT 180  
 TTGATAANGA TTTCGTTATC ANTAAA 207

SEQ ID NO:6993  
 SEQUENCE LENGTH:325  
 SEQUENCE TYPE:nucleic acid  
 45 TOPOLOGY:linear  
 CLONE:HUMGS08228  
 SEQUENCE DESCRIPTION:  
 50 GATCCTGATT GTAAGGTTTT CCACCTATTT CCCTGGATAT TTTNNTGGTC AGTACTGGCT 60

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CTGGTGGGTG TTCCTTGTTT TAGGCTTTCT CCTGTTTCTN AGAGGATTTA TCAATTATGC 120  
 AAAAGTTTCGG AAGATGCCAG AAACTTTCTC AAATCTCCCC AGGACCAGAG TTCTCTTTAT 180  
 TTATTAAAGA TGTTTTCTGG CAAAGGCCTT CCTGCATTTA TGAATTNTGG TCTCAAGCAG 240  
 CAAGNGAACA CCTGCAGGAN GTGAATCAAG CTGCAGAACA CAGAGGNNTA CTCACCTGCT 300  
 TTAATAAAT ANAGTACTGT TGATN 325

SEQ ID NO:6994  
 SEQUENCE LENGTH:130  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08229  
 SEQUENCE DESCRIPTION:  
 GATCCCTCGG GNNTTAANTA CANGAACCT AGAAGTACC AAAAGGCATT ATAAGTCTGA 60  
 CTCAAATACA AGGTACAGAA GATAAGCATC TTTGAGGAAA CTCCTACTTC AGTTCTTTTG 120  
 TTATNATGNN 130

SEQ ID NO:6995  
 SEQUENCE LENGTH:116  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08230  
 SEQUENCE DESCRIPTION:  
 GATCATATAA CATTCCAGGT ACTCAGGATG AATGGTTTGA GGACTGGTCT GAATTCTTCA 60  
 AAGGTTTCAG CTGTATTAC ATTCTCCATC TAATAAATT TATCTTGTC TGAAGA 116

SEQ ID NO:6996  
 SEQUENCE LENGTH:33  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08232  
 SEQUENCE DESCRIPTION:  
 GATCAGCAAA TAAATGAAAT TTATTAAGA AAA 33

SEQ ID NO:6997  
 SEQUENCE LENGTH:246  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08233  
 SEQUENCE DESCRIPTION:  
 GATCTTTAGG CAGTTTTTAC TTGGCCAGAA AGCAGTGCTG AATACTTGNA ACTGTGTGCT 60  
 CTGTTCTACT TAATGTTCTG TCAGAATGTT CTTTGTAGG CAGTATGTCA TGNGTGTAATC 120  
 ATCTATCTCC TNGTCTGTTT CCAAGTTNNN CTGTGAAGTC TGCGACCCTT TTGNGGTGGT 180  
 CATCANAGTC ACAGATTCTT TGTTTAACCA NGTGTCCNA AGCATGTACC TGNAGTTATA 240  
 TCATNN 246

5 SEQ ID NO:6998  
 SEQUENCE LENGTH:186  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08234  
 SEQUENCE DESCRIPTION:  
 10 GATCATTATG CAATAAAGCT GCTAAAGTCA CATTGTGGT TGATACTCAA GCCTTGTACA 60  
 AGCACATATC ATGTAGACAT TTTTAAATGT GAAGCTTTAA CAGGNATAGG ATAGCTGTTT 120  
 CAAACCTTGT GCAATTGTAA ATAANTTGT TAGCTGTGTT TCTTTCATTT TTAATANAAA 180  
 NTTAAA 186

15 SEQ ID NO:6999  
 SEQUENCE LENGTH:154  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08235  
 SEQUENCE DESCRIPTION:  
 20 GATCTTCATA TTAATCTTAA AATTTTGTA CGTGCTTTT TCCTTTTTT CCACAGTTT 60  
 AATATATNAT TCTTCAACGA CATTTTTGT AACTTTACAC TTTTGTGGT ATNTTATTT 120  
 AAAAAATGA AAAATTAATT TAAAAAATG CAAA 154

25 SEQ ID NO:7000  
 SEQUENCE LENGTH:195  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08236  
 SEQUENCE DESCRIPTION:  
 30 GATCTGGTAC GNGGNGGACG NCATGGCCCG AGATGCCAC GGAACACAG CGGTGACCTA 60  
 CGCCCGNCAG GCCTCCAGCC AGGAGTGCAT CAACGTGCTT CTGCAGTACG GCTGCCCCGA 120  
 CGAGTGCCTG TAGTATCTGT TTTATTTNNC TGNAGTCTCC TTGGTGTAAG AACAAAATNG 180  
 35 GNAAAATAAG GATAN 195

40 SEQ ID NO:7001  
 SEQUENCE LENGTH:163  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08237  
 SEQUENCE DESCRIPTION:  
 45 GATCAGGCCC TAAACGTTG TTGTGATGAG GTTCTTTAG CAAGTCTTG TTAAATTAT 60  
 CATTATTTG ATGAGTGAAG TTTTAAACAT GCTTTGCTGT GTGAAATTA AAAAAGGGAT 120  
 GTTTTCCAG GCTGGAACAA TAAATGTGGC TGTGCAGTTT AAA 163

50 SEQ ID NO:7002  
 SEQUENCE LENGTH:127  
 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear  
 CLONE:HUMGS08238  
 SEQUENCE DESCRIPTION:  
 5 GATCTTTGTG AAAGTAGTAC AGTATATNAC CTTTAATTNC TTTTATTTT TAAATATACT 60  
 GTNACCNTGA AGCACTGGTT GGGCATTITA ATTCAATGTTA ATAAATCACA ATTATGTCAG 120  
 TTTTAAA 127

10 SEQ ID NO:7003  
 SEQUENCE LENGTH:123  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08239  
 15 SEQUENCE DESCRIPTION:  
 GATCAGCCTC CTGTCTTATG TGGGCACGTT CCAAAGTTTA AATGCATTTT TTTGACTCTT 60  
 GGCCAAAATT TAGAAGATGC TGTGAATATC ATTTTGAAC TGTGTAAATA CATGAAAGAG 120  
 AAA 123

20 SEQ ID NO:7004  
 SEQUENCE LENGTH:260  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS08240  
 SEQUENCE DESCRIPTION:  
 GATCTCAGCA TTACCTCTTT GGNAAGGAA GGTAGTTCAA GAAATGAAGA GCTGTTGATG 60  
 GGATGATTGA AGAAACAGCT ATGAGAGGAT TGGCTCCCAT CTTTGTGNAC TCTGGGNCA 120  
 TCCTGTGATC TGAGAATGAA CAAAGACCAA TTTTGTGT GTGAAGCTTA AGGGTCATAT 180  
 30 GTTGCTTGT NTTTNTAAT GCTAATCCTT GTGAAANTAA ATTGNCCAGG CGGAAGGAAA 240  
 NCTCTATTTT AGGATNCAAA 260

35 SEQ ID NO:7005  
 SEQUENCE LENGTH:79  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08241  
 SEQUENCE DESCRIPTION:  
 40 GATCTGTATT TNTATATACA CGTGTCGNA CAAGTATAAC TAAATAAAAA TTAAAGNTTT 60  
 TAATCATTTT AATTGGAAA 79

45 SEQ ID NO:7006  
 SEQUENCE LENGTH:59  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08242  
 SEQUENCE DESCRIPTION:  
 50 GATCATATTT CTGCCAAGNA TGTGCCTTCA ACTTTATAAT TATAGTGTG TAAAATAAA 59

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SEQ ID NO:7007  
 SEQUENCE LENGTH:67  
 SEQUENCE TYPE:nucleic acid  
 5 TOPOLOGY:linear  
 CLONE:HUMGS08243  
 SEQUENCE DESCRIPTION:  
 GATCTCACTT TTNCTTATTA GAATTTGTAC CTTTGTTTGA TTAAGGAAAT AAAAGATGAA 60  
 10 TGACAAA 67

SEQ ID NO:7008  
 SEQUENCE LENGTH:76  
 SEQUENCE TYPE:nucleic acid  
 15 TOPOLOGY:linear  
 CLONE:HUMGS08244  
 SEQUENCE DESCRIPTION:  
 GATCAGTCTC TCAGTGCCTN CCTACTGGGC AGCTCATCTG TCCACTTATT CGTATTAAAT 60  
 20 TTNCTTTTTA TTAAAA 76

SEQ ID NO:7009  
 SEQUENCE LENGTH:162  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS08245  
 SEQUENCE DESCRIPTION:  
 GATCCACATC CCANATGCTG AACCAGAGAG CCCCTCATCC CTCCTCCCAG TACTTAGGCA 60  
 GCGCCTTCTG TGTGCACTGC CTCITGCCGG GCACTGGGTA GGTGCACACG NGGACCGGGA 120  
 30 CAGGGCCAGA NACTTTGGTN CCCGNGGTTT GTNTGNGGGG NN 162

SEQ ID NO:7010  
 SEQUENCE LENGTH:58  
 SEQUENCE TYPE:nucleic acid  
 35 TOPOLOGY:linear  
 CLONE:HUMGS08246  
 SEQUENCE DESCRIPTION:  
 GATCGATTAA GTCTAGGAGT TTNAGACTTG CCTGGGCTTA GCAAGACCCT GTGGCAAA 58  
 40

SEQ ID NO:7011  
 SEQUENCE LENGTH:275  
 SEQUENCE TYPE:nucleic acid  
 45 TOPOLOGY:linear  
 CLONE:HUMGS08247  
 SEQUENCE DESCRIPTION:  
 GATCCTTGAG TCTCCNCTCT GGATGGAATC CGCGAGCTGG CCACCTGGCC ACCCTCTACA 60  
 CGACTCCACC CNCCATGGC CGTGGGGCCC TTA CTCTCTG ACTTCTCAGG ACACAGGTCA 120  
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TGGAGGTTCT TCCCAAGCTG GCAGAGGCCA TTTGTGGAAA GTGGAGAGCT ACGTGGTGGN 180  
 CATCTGCCAA CTCCAGCATC TCTGGNGGGG NTCCACGNTG AATGTNATTT TTGAAAACAG 240  
 CTTATGTANT TAAAGGTTGA ATGGCACATC ATAAA 275

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SEQ ID NO:7012  
 SEQUENCE LENGTH:124  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS08248  
 SEQUENCE DESCRIPTION:  
 GATCAAGACC ACCCTGGCTA ACACGGTGAA ACCCTGTCTC TACTAAAAAT AAAAAAANTT 60  
 AGCCGGGCAT GGTGGCACAC GCCTGTACAT CCCAGCTACT CANGGNGGCT NGTGGCATGG 120  
 NGNN 124

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SEQ ID NO:7013  
 SEQUENCE LENGTH:215  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS08249  
 SEQUENCE DESCRIPTION:  
 GATCANGAGC CCTTTNCTC CAGTAGTACA GGCTTTGAAA ACTACTTCTA TTAAGTTATT 60  
 GATGCAATTT GATATTTTT CATAATCTAT ATTTAAACAA AATTACATCA TTGCATCATC 120  
 TTTTCTAAAT TCATCTCCAT TAAACTTGC CTTAAGCTAC CAGNTTGCTT TTGCCANNGN 180  
 NGGCCATACT GTGTGTTTGT TTGTTAATN NNCTN 215

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SEQ ID NO:7014  
 SEQUENCE LENGTH:373  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08250

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SEQUENCE DESCRIPTION:  
 GATCTCTCAG GGATAGAAGA TATTTCTCAT GAAGGCAGCC TAACTCTGAG GAAAACAATG 60  
 CCAATTCAAG TACAGATTTT AACACATCTT CAACACTATG TGAAGGGTTC ACATCTTAAC 120  
 CTGTGCAATT CAGATTGATA CTCAGAATAT GGGTTGATTT GAATATCTGA AATATCAATG 180  
 GAAAATCCCA CTNNGTTTTT GATGAACAGT TTGAACAGTT TTCTGTAATC AAGCAGCTTG 240  
 CATAGAAATT GTATGATGAA ATTTTNCGNN GGTTCCTGGT GCTGTTTTGT TCTTTTTTTG 300  
 TTTTTGTG TTTTGTATT TACTTATATA CATATAANCT TTTNTTGAAA ATATGTTTTG 360  
 GTTACTAANA GTN 373

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SEQ ID NO:7015  
 SEQUENCE LENGTH:219  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08251

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SEQUENCE DESCRIPTION:

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# EP 0 679 716 A1

5 GATCCCAACC TGGACCCACT CATGAACCCT CACATCCGCG TGGCCCCCTC CTNAGCCCCN 60  
 TTGCTTGTGG CTAGGCCAGC CTAGGATGTG GNTTCTGTGG AGGAGAGGCG GGGTAATGGG 120  
 GAGGCTGAGG GCACCTNTNC ACTGCCCTC TNCNTCAAGC CTAAGNCACT AAGACCCAG 180  
 ACCNAAAGCC AAGTCCACCA GAGTGGCTGC AGGNCAGGN 219

10 SEQ ID NO:7016  
 SEQUENCE LENGTH:91  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08252  
 SEQUENCE DESCRIPTION:  
 15 GATCGTTGA ACCCATAAGC TGGAGACCAG CCTGTGCACA TGGTGAGACC CTGTCCTAC 60  
 CAAAAAAT AAAGTCATTA GAGTTTTTAA A 91

20 SEQ ID NO:7017  
 SEQUENCE LENGTH:176  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08253  
 SEQUENCE DESCRIPTION:  
 25 GATCTGATGG TTTATAAGG GGCTTCCCCC TTCACTCAGC TCTCATNTT CTCTCTCTG 60  
 CCACCATGTA AAGAAGGATG TGTTGGTTT CCCTTCCATC ACGATTGTAA GTTTCCTGAG 120  
 GCCTCCTAAG CCATGTGGAA CTGTGAGTCA NTTAAATCTC TTTACTNTAT NNNGNN 176

30 SEQ ID NO:7018  
 SEQUENCE LENGTH:174  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08254  
 SEQUENCE DESCRIPTION:  
 35 GATCATCACT TACCCACCCC CCAAGTTCAA GACCAAATCT TCCAGTGCC CNNTTCGTGT 60  
 TTCCCTGTGT TTGCTGTAGC TGGGCATGTC TCCAGGAACC AAGAAGCCCT CAGCCTGGTG 120  
 TAGTCTCCCT GACCCTTNTN AATTCCTTAA GTCTAAAGAT GATGAACTTC TAAA 174

40 SEQ ID NO:7019  
 SEQUENCE LENGTH:45  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08255  
 45 SEQUENCE DESCRIPTION:  
 GATCCTCCCT TTCCTATAGN GNTAAAAGTG ATTTATCTTG GCAAA 45

50 SEQ ID NO:7020  
 SEQUENCE LENGTH:109  
 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS08256

SEQUENCE DESCRIPTION:

GATCATGTGA TGTGGAGTA GGAGGGTTA TNTGGTGAC TTTGGGATGC TGGTTTCATT 60  
GTAGGTATAA TNATGNGGNG CAAAGAATCC AGGNAAGAAT TGCCAGAGN 109

SEQ ID NO:7021

SEQUENCE LENGTH:225

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08257

SEQUENCE DESCRIPTION:

GATCCCACTG AGGCCAGAGA ATAGGGTCTG GAGACAAAGG AGCATTCACT TCAGCCTCTG 60  
ACTGGTGGCA GGCCAAGTNT TTATTACAT AGGGTGTAAC CAAATAGGAA ACCTCTAAAG 120  
GGTACTTAAA CCCCAGATT TTTACACAGG GCACCTGCTT GAGCCTCATC CCGCTTCTG 180  
GAATGTACTT TTGCTTCAAT AAATCTGTGC TTTTGTTCCT TCAAA 225

SEQ ID NO:7022

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08258

SEQUENCE DESCRIPTION:

GATCTGGAGG GCGTGGCTAC AGGACCCGGG ATGCCATTCA GTTACTCATC TTTNATGCTT 60  
TCGTCTGAC CTGTCTCAAC TAGACTTGCT CCTGCAACCA CCATGGGGGT TTTGCATTTA 120  
CATTTGTGGA CCATGTTACA GTTAAGAAAA ATCCTGTTTC AGTCCTTATA TGAATAAAA 180  
TGTTTTATGA TGTAAA 196

SEQ ID NO:7023

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08259

SEQUENCE DESCRIPTION:

GATCTNTCCT CCGCTTGAGA AGACCATGGA ACTGGATAGC TCACTTCGGG AATACAACAT 60  
GTTTCCCCGC AAAGGCCGGG GNCTCCCTAG NTCAAATTC CAATCTCATN AGCAGGTGNT 120  
AGAAAGGTNT TGTGGTAGCA ACTNCATGAT TTCTCTGTGA CCAAAATNAN 170

SEQ ID NO:7024

SEQUENCE LENGTH:84

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08260

SEQUENCE DESCRIPTION:

GATCAAATGT AAATNTTTT AGGATATTTT NCTTGTTTTT NAAAAATCAAT TTTTAACCAA 60

ATATTAAACC CTTTATTGTC CAAA

84

SEQ ID NO:7025

SEQUENCE LENGTH:246

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08261

SEQUENCE DESCRIPTION:

GATCCACCAC TGGNCTCTCC CTCCCCCAGC CTGGAGCAGC GGAGGGGAGG TGACGGCTGG 60  
 TGA CTGATGG ATGGGTAGTG GGCTGAGAAG AGGGGACTAG GAAGGGCTAT TCCAGGCTCA 120  
 GCCCTGTAC TGCAGCTTTG CCGCTGAGTG TAGGAAAAAC AGGCATGACA GACCAGGGTG 180  
 AGGGTTGTGC CCAGCTGGGC CACGGCCATG CGTGGGGTGG CCCAATAAAC ACCGTGGACT 240  
 CCCAAA 246

SEQ ID NO:7026

SEQUENCE LENGTH:45

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08262

SEQUENCE DESCRIPTION:

GATCAGTCTT TATNAATAAA ACCTGTTCTC TTTAATCAGC TTAAA

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SEQ ID NO:7027

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08263

SEQUENCE DESCRIPTION:

GATCAGACTG NTAACCTTAA CACCATAGGT GCAAAAANGAG TTGTTCTNAG GTTTTTTTGA 60  
 AACATTAAAG TTCCAAAACA TGACATTTTT AAGAATAAAT TTGAAATAGN GTATGATTGA 120  
 ATGCAGAGNA TTATGTACCT CTAATTGCTT AATTTTGTAG NGGTCTTTNA TTGTAGAATT 180  
 GGNNCN 186

SEQ ID NO:7028

SEQUENCE LENGTH:271

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08264

SEQUENCE DESCRIPTION:

GATCTCTTGG TAACAATTGA CATTGCACTA GNATTTGAAT GNTACTGTTG TTGGCATTTC 60  
 TGTANTCTT TCAAGTAGTT GTAAATAATC TCITTTTCTC ATATAAACGG AATGCATAAT 120  
 GTCTTACTCT TGAGTCATTT AGTAGCATTG ATATGGTACC AAGTTGTATA GCAGTGTAAC 180  
 AAAATCATGC TTTGACAATG NAATTTACAT ATTGCCTCAC CTAGAGATGT TTTGTCTGTA 240  
 TGACTNNTNN CNTNTAAAG TTNGNCNAAC N 271



SEQ ID NO:7029

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08265

SEQUENCE DESCRIPTION:

GATCAATCA GGGTAATTGG GTATCCATCA CCTCAAACAT TTACCAITTC TTTGTGTTGG 60  
 GAACATTCCA TATCTTTTTT TCTAGCTGTT CTGAAATTG CTATACGTTT TTTAACTAA 120  
 AGGTCCCTTG CTGTGTTATG GAACACTGGA ATTTGTTCTT TCTGTTTAA TGTATTTTGG 180  
 TACCTATTAA CCAACTTCTC TTTATCTCTC CCCGTCCTCT ACCCTTCCCC AGCCTGTGGG 240  
 AATCACCCAT NCTACTCTCT GCCTTTATGA GATTACTTN TTNATCTCC CNATATAANA 300  
 N 301

SEQ ID NO:7030

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08266

SEQUENCE DESCRIPTION:

GATCGTAGAA ACACAGAAATG GGACTGGGGA AGCCCTTTGG AAATCCAGCT GCAGAAACAG 60  
 ACACCCCAAT GCTATTTACA TACAGCTCTA TATATATAAA AAAAGNAAAT ATGNAAA 117

SEQ ID NO:7031

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08267

SEQUENCE DESCRIPTION:

GATCTCACCA GGGCCCAGTC ATATATGCAC AGTTAGACCA CTCCGGCGGA CATCACAGTG 60  
 ACAAGATTAA CAAGTCAGAG TCTGTGGTGT ATGCGGATAT CCGAAAGANT TAAGNGAATA 120  
 CCTAGAACAT ATCCTCAGCA AGAAACAAAA CCAAAGTGA CTCTCGTGCA GAAATGTAG 180  
 CCCNTTACCA CATGTAGCCT TGGNGACCCA GGCAAGGACA AGTACACGTG TACTCACAGA 240  
 GGGAGNGNAA GNTGTGTACA AAGGNTATGT ATAANTNTTC TTTTAGTCA TCCTATN 297

SEQ ID NO:7032

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08268

SEQUENCE DESCRIPTION:

GATCCTGGGG ACTCATATTC TTTCAGAATC ATGTAAATAA ATGGCATCAT GTTGTAAT 58

SEQ ID NO:7033

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear  
 CLONE:HUMGS08269  
 SEQUENCE DESCRIPTION:  
 5 GATCTATTTG GCCTCTCAAA TNAACTNAGA TTCCTGTAA AAAAGATTGA TGTTATTGTC 60  
 TCTTGTAGAG GAAACTAATA AAGTGTGTGT ACCTNTGTGN AAA 103

SEQ ID NO:7034  
 SEQUENCE LENGTH:265  
 10 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08270  
 SEQUENCE DESCRIPTION:  
 15 GATCAAGAGT NATGGGCCTT GGAGCCCTTG CCAGCCAGC CCACCTGTNA GGAGGCTGCC 60  
 CATCCCCTCT TTNAGGCCAC CCTGTGTCCT CTCCCCTGCC TCTGCCAGA GCTCCAGCCG 120  
 GAGTGTCTTG CTGCTCAGAC CCCTCCGAGG TCCAAGTCCT GTCCTGCCAC TCAGCTCCCN 180  
 CTGCACCCCA GAAGAAACGC AGGGTGCAGT TGCATTGAT TTCAGATAAA CAACAACCTC 240  
 TTAGTAAAT NACCTNCCA CTAAT 265

SEQ ID NO:7035  
 SEQUENCE LENGTH:46  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS08271  
 SEQUENCE DESCRIPTION:  
 GATCAATCTT GANGTGAAAT ATTTCCAAA TAAATTCTA CAGAAA 46

SEQ ID NO:7036  
 SEQUENCE LENGTH:254  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS08272  
 SEQUENCE DESCRIPTION:  
 GATCTTTGCA TAGAATGTCA AGCTAACCAG GCGTCCGNTA CTTCAGAAGA GTGTACTGTC 60  
 GCATGGGGAG TCTGTAACCA TGCTTTTAC TTCCACTGCA TCTCTCGCTG GCTCAAAACA 120  
 CGACAGGTGT GTCCATTGGA CACAGAGAG TGGGAATTCC AAAAGTATGG GCACTAGGAA 180  
 40 AAGNCTTCTT CCATCAGGNG TTAATTGTTT TGTTATTCAT TTAATGGCTT TCCCTGCTGT 240  
 TACCTAATTA CATN 254

SEQ ID NO:7037  
 SEQUENCE LENGTH:222  
 45 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08273  
 SEQUENCE DESCRIPTION:  
 50 GATCATTGAG AAAGTGTGTTG AAACCTTCTC ATGAAGTGTA TATATAATGG CGTGAAAAAT 60

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5 TCCTTTGGAA AAATNTATGT NCCTTTCATT TTGCCCAAAT TGCAAATTTT CAGCATGGNT 120  
 GTGAAAAGCA TTAATAATTAT AACTTTGTGT ACANGATGAA AATAATTCAC TAAATTTGCC 180  
 CTTTTTTACA CAAAATAAAA TGTTAANGTT ANNGCTGGNA AA 222

10 SEQ ID NO:7038  
 SEQUENCE LENGTH:32  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08274  
 SEQUENCE DESCRIPTION:  
 GATCAAATGA CANTAAATCA TTCAAAATCA AA 32

15 SEQ ID NO:7039  
 SEQUENCE LENGTH:109  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08275  
 20 SEQUENCE DESCRIPTION:  
 GATCACCCAG GTACANCATG CTCTATATCC ATGCGGCCCT AGAAACCCAA GGAACATATA 60  
 CAACCACTCT TGTGTCCCTC CTTATAACCN CAGNTTTATN CNAGAAGTN 109

25 SEQ ID NO:7040  
 SEQUENCE LENGTH:301  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08276  
 30 SEQUENCE DESCRIPTION:  
 GATCACAAAT TGGTGCATTC TTAAGTGTGG ATAATTATGT ATGAAGCCAA ATTGTAATAA 60  
 AACTGTTATT TGCCAAACAT AGAANCCTTG CTCGTGACT AGGCTGAGCC CAGAGTGTTA 120  
 TTCTCTTCTT CTGCCTGTNA TGTATCTGGG CAATTTGTAG GGCCTTTGCA GGTGAATCCA 180  
 35 GTAGAGAACC ATGCTAAGAN TGNGCAGCAG TCATGCATGC CTGTATCATT GAAAGCCTTC 240  
 CTNGCCATTT TNACAGCTTC ACCTTNCGTG GTTTTTATTT TTTCCAGAGG GGGCCTGGGG 300  
 N 301

40 SEQ ID NO:7041  
 SEQUENCE LENGTH:151  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08277  
 45 SEQUENCE DESCRIPTION:  
 GATCCTCCTC CCTAAGCGCT TATCTTGGTG CTTCCAGCTC AGTCTGGCCA ATTCCACCTC 60  
 TATGAGATAA GGAGGGTTCA GAGAAGCCAG TCACTTTGCT GTTTTCTGTC NCACAGAGTT 120  
 TCTCTAATAA ATCTTATTCT ATGTCTACAA A 151

50 SEQ ID NO:7042

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SEQUENCE LENGTH:138

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08278

SEQUENCE DESCRIPTION:

GATCACATTG TTTGACCCAG TATGTCTTGT AGACACGTTA GTTATAATCA CCTTGTATCT 60

CTAAATATGG TGTGATATGA ACCAGTCCAT TCACATTGGA AAAACTGATG GTTTTAAATA 120

ANCTAATTCA CTAATAAA 138

SEQ ID NO:7043

SEQUENCE LENGTH:300

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08279

SEQUENCE DESCRIPTION:

GATCTGTCAA CAGGTAAAGT CAATCTGGGG CTTCCTACTGC CTGCATTCCA GTCCCCAGAG 60

CTTGGTGGTC CCGAAACGGG AAGTNCATAT TGGGGCATGG TGGCCTCCGT GAGCAAATNG 120

TGTCTTGGGC AATCTNAGGC CAGGNCAGAT GTTGCCCCAC CCACTGGAGA TGGTGCTGAG 180

GGAGTGGGT GGGGCCTTCT GGGAAAGGTGA GTGGAGAGGG GCACCTGCCC CCCGCCCTCC 240

CCATCCCCTA CTCCCCTGN TCAGCGCGGG NCATTANAAG GGTGCCANAN ATTTTTTTNN 300

SEQ ID NO:7044

SEQUENCE LENGTH:90

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08280

SEQUENCE DESCRIPTION:

GATCTCATTC CATGGGAAAA AAAAAAATCC TGTCTTGTTT ATAAATTGAC AATGTCACTA 60

AATAGAAATA AAGTGCACAN TAAATGNAAA 90

SEQ ID NO:7045

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08281

SEQUENCE DESCRIPTION:

GATCTNAGTT AGACATCACC ANTGGAAATC GATTGGAATA GAAACTTAAA GGAAATGGAA 60

CCCTGACTAT TCTCCCATCA AATCATATAT GTTGACCTGT CTGAATTATA AACCAGCCTG 120

ACCTTTCCTT TAGCATTAGA TGTAATAAAA TAACTTTGGA AATTTGTNAT TTAAA 175

SEQ ID NO:7046

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08282

## SEQUENCE DESCRIPTION:

5 GATCCTCAGG ACTGACCACT TAGCTGGCAG GTTGTNCAGC TTTTAATTCC AGTCATAATA 60  
 GGTGACAGTG TTAACCGTGA AANTTTGNGA GGCACNTTTG NCCTCTTCCC TATAAAAATC 120  
 ACACAAGCGT GNTTTTACAA AGGGTCCCCG TGGGAACCTT NGCTTAAGGA CCCTTTGNCC 180  
 CNTCAGTTAN 190

SEQ ID NO:7047

10 SEQUENCE LENGTH:147  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS08283

## SEQUENCE DESCRIPTION:

15 GATCCTCAGG ACTGACCANT TAAGCTGGCA GGTGTGCCA GCTTTTAAAT CCCAGTCATA 60  
 ATAAGGTGAC CAGTTTAAAC CCGTGNAAC TTNGAGGGGA CTTTTCCTT TTCCCTATNA 120  
 AATNACACNG GGGGGTTTAA NAAGGTN 147

SEQ ID NO:7048

20 SEQUENCE LENGTH:223  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS08284

## SEQUENCE DESCRIPTION:

25 GATCCATCTG CCCTCATAAA AGTGTTCCAGG TACAGCAGCT GAGGCTGCCC TGAGNAATCA 60  
 AGGGGCCATT ACCAAGGGGC AGGAAAAGNA TATGTAAGAG GTGGCCTTCA TGGTAGAGCT 120  
 TGACCCAAGA ACTACTCCAN ATTCGGATGG CCCAGACTGG GNGCATCCCC TGACTTTCCC 180  
 TTTGACTTCA CCCTGTTTGT AAATAAANCA AGGNAGATGC AAA 223

SEQ ID NO:7049

35 SEQUENCE LENGTH:56  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS08285

## SEQUENCE DESCRIPTION:

GATCTCCTCC CTNGTTTAAA TGTCATAAA TGCCCCAACT GCTTTGTAAG TGCAAA 56

SEQ ID NO:7050

40 SEQUENCE LENGTH:107  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS08286

## SEQUENCE DESCRIPTION:

45 GATCACCTTA AAATTATTTN ACGNACTGNA GNCAATNAAG TCCGTTATGT TTAGAGTAGA 60  
 AAATGTTTAG GTTAAAGAGC ATCTGTCAAC AGAATCTACA AAAAAGN 107

SEQ ID NO:7051

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SEQUENCE LENGTH:125  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08287  
 SEQUENCE DESCRIPTION:  
 GATCCAATTN CATNNGCGGC TGCATCTNCT GTCATGCCG CCCAAACACC ACCCAGATGT 60  
 CACTTACGTC AAGAAGGTCC GGACCCTCCG TATGCACCTG TTCACGGCCC TGCAGCTGCT 120  
 NTGNN 125

SEQ ID NO:7052  
 SEQUENCE LENGTH:276  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08288  
 SEQUENCE DESCRIPTION:  
 GATCCAAGAA ACGNANGACA CAACAACAAC GATGCCGTGT GTCTGCTCTA CCTGGGCAAG 60  
 CTCAAGNACT CCCTGCGGCA GCTNGAGGCC ATGGTCCAGC AGGACCCAG GCACTACCTG 120  
 CACGAGAGCG TGCTCTTCAA CCGTACCACC ATGTACGAGC TGGAGTCCTC ACGGNGCATG 180  
 CAGAAGAAAC AGGCCCTGCT GGNGGCTGTC GNCGGCAAGG NGGGGGCCAG CTTTAACACA 240  
 CAGTGCCTCA AGCTGGCCTA GCTGNNTNNN ACACAN 276

SEQ ID NO:7053  
 SEQUENCE LENGTH:209  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08289  
 SEQUENCE DESCRIPTION:  
 GATCGAGTTT ACAGTTGTGN NNTCTTGAAG GTATTACTTA ACTTCACTAC AGCTTGTCTA 60  
 GAAGACCTTT CTAGGNGTTA TCTGGTTCTA GAAGGGTCTA TACTTGTCTT TGCTTTTAAG 120  
 CTATTTGACA ACTCTACGNG TTGTAGNAAA CTGCTAATAA TACAAATNCT TGTGTGCCAT 180  
 GGNAAGGCAA ATAAATTNC TACAGTGNN 209

SEQ ID NO:7054  
 SEQUENCE LENGTH:126  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08290  
 SEQUENCE DESCRIPTION:  
 GATCTCATTT TCAGTTTAAG TAACTGCTGT TACTTAAGTG ATTACACTTT TGCTCAAATT 60  
 GAAGCTTAAT GGAATTATNG CCCTCAGGAT AGTATTTTGT AAATAAAGNT GATTAAATA 120  
 TGNAAA 126

SEQ ID NO:7055  
 SEQUENCE LENGTH:276  
 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear  
 CLONE:HUMGS08291  
 SEQUENCE DESCRIPTION:  
 5 GATCGCACCA TTGCACTCCC ACCTGGGCAA CAAAGAGTGA AACTTGGTCT CAGAAACGAA 60  
 ACAAACACA AAAACCTTTC TNAGTCCCAG CATATGTGGA GCAGCCTCAT TCTTCATAGC 120  
 TGTGTGTCAT TCCGTTGCGT GATGGGGTCA CAGAGCACAG ACCTGGTGCC CTTTTCCTTT 180  
 TTAATATGTG GAAACCCCTC CATGCTTTCC AAAGCCTACA AGTACAGCAG CCCCAGTTT 240  
 10 AGGGTGNGCA GCAGTGGTCA GAGCTCTTN CTANTN 276

SEQ ID NO:7056  
 SEQUENCE LENGTH:276  
 SEQUENCE TYPE:nucleic acid  
 15 TOPOLOGY:linear  
 CLONE:HUMGS08292  
 SEQUENCE DESCRIPTION:  
 GATCTCCAGG AGTCCCCTGC ACATACCTTC TCCATCGTGT CAGCTGTGTT TCTCTTGATT 60  
 CCGTGACACC CGGTTTATTA GTTCAAAAGT GTGACACCTT TTCTGGGCAA GGAACAGCCC 120  
 20 CTTTAAGGAG CAAATCACTT CTGNNNNAGT TATTATGGTA ATATGAGGCA ATCTGATTAG 180  
 CTTACAGAC TGAGTCTCCA CAACACCAAA ATATCCAGAT GTAAACCCCA AACTGTGACA 240  
 CAAANGNAAG CACAGATTGT TTACCTGTTG TGGAGN 276

25 SEQ ID NO:7057  
 SEQUENCE LENGTH:167  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08293  
 30 SEQUENCE DESCRIPTION:  
 GATCCCTGTT ACCCAGAGAA TANNTACATT CTTTATCTTG ACATTCAAGG CATTCTATC 60  
 ACATATTGTA TAGTTGGTGT TCAAAAAAAC ACTAGTTTGT TGCCAGCCGT GATGCTCAGG 120  
 CTTGAAATGC ATTATTNNGA ATGTGAAGTA AATACTGTAC CTTTAAA 167

35 SEQ ID NO:7058  
 SEQUENCE LENGTH:69  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 40 CLONE:HUMGS08294  
 SEQUENCE DESCRIPTION:  
 GATCACATAC CCTTCTTTTA AGTGAATTTT TTTCATTGTA TTTGTCAATA AACGAATCAA 60  
 ACTGGNAAA 69

45 SEQ ID NO:7059  
 SEQUENCE LENGTH:222  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 50 CLONE:HUMGS08295

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## SEQUENCE DESCRIPTION:

5 GATCTCCCTG CCTGGGCTGG CTGTGAGGCC ACCTTTGTCC CAGGCCCAGC CTCAAGGCAA 60  
GGAGGGCGCT TCACTGAGGT GTGAATTGTA CGTACAGGCT TTTATATAC CAAAAGTATT 120  
TTTTGACTAG ACCATTCAAA GCTACCCGAA CTATGTTGGA AATTTTTTTT TTCTCATTAA 180  
AATACAGGCC CTTAGGCTCT ATTTTAAATG TATNAGTCGC AN 222

SEQ ID NO:7060

10 SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08296

## SEQUENCE DESCRIPTION:

15 GATCAAAATA CCTGTTTATA TATCTGTTAT TTAAAGAAAA ATTTCCACA GTGTTTGT 60  
ATTTCCAGC GTTCTTAGN ACATTTGGG ATTNCACTAA AATATAGCTG GGTGGATTGA 120  
AGTAAAGGGC AANTGCGTTT GCAAA 145

SEQ ID NO:7061

20 SEQUENCE LENGTH:20

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08297

25 SEQUENCE DESCRIPTION:

GATCTTCCAA AACACACAAA 20

SEQ ID NO:7062

30 SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08298

## SEQUENCE DESCRIPTION:

35 GATCAATCAA GAATAATTTT AATTTTCTTT TGTATTTGAA ATGTAAATAG TTTCTTTTC 60  
GATTAAAAA ATTTCTATA ACTGCTAAAC AGTTAAAANC TTAAAGTAG TAAATGAGTT 120  
TATAGAAAGC ATGTATTCTT GATTTTNGTG CCTTGGTAAA GTTGATAACT ATTTATGAAT 180  
ATTTGACCAA ATTATTCCAG CATCAGAATA ATAAGCAAAA TAACCN 227

SEQ ID NO:7063

40 SEQUENCE LENGTH:209

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08299

45 SEQUENCE DESCRIPTION:

50 GATCACACCA CTGCATGCCA GCCTGGGCGA CAGAGTGAGA CCCTGTCTCA GAAAAGAAAA 60  
AAAAAGTAAA AATTGCATGT AAGTTGACCC GCACTATTCA AATTGTGGT GTTCAAGGTT 120  
CAACTGTAAT TTCCTAGCAG CATTTTGTGT GTTTGAGAAT CTCTTGACAC TCTCAAGTA 180  
AATCCCTAAA TTACAACTTT GACATCAAA 209

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# EP 0 679 716 A1

SEQ ID NO:7064  
 SEQUENCE LENGTH:130  
 SEQUENCE TYPE:nucleic acid  
 5 TOPOLOGY:linear  
 CLONE:HUMGS08300  
 SEQUENCE DESCRIPTION:  
 GATCGACTGA GCTCAAATTT CAGTTGGGGC CCTATTAGTC TGCCTTTCCA AAAAGGGCGT 60  
 10 TGGGACTTTA ATTTAAAACT TAACCAGTTG AAAAATAAAG GTGGCGTGGA AATGCTTTTT 120  
 GATTTGCAAA 130

SEQ ID NO:7065  
 SEQUENCE LENGTH:223  
 15 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08301  
 SEQUENCE DESCRIPTION:  
 GATCTGGGCT TTAAAGCAGA GGCCATGTCC TTGTCTGGTC CTGCTTNTGG CTACAGCCAC 60  
 20 CCTGGAACGG AGAAGGCAGC TGACGGGGAT TGCCTTCCTC AGCCGCAGCA GCACCTGGGG 120  
 CTCCAGCTGC TGGAATCCTA CCATCCCAGG AGGCAGGNAC AGCCAGGNNG AGGGGAGGAG 180  
 TGGGCAGTGA AGATGAAGCC CCATGCTCAG TCCCCTCCNA TNN 223

25 SEQ ID NO:7066  
 SEQUENCE LENGTH:260  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08302  
 30 SEQUENCE DESCRIPTION:  
 GATCGGAGAC ATCCTGCTGT TCGGNACGTT GCTGATGAAT GCCGNGGCGG TGCTGAACTT 60  
 TAAGCTGAAA AAGAAGGACA CGCAGGGCTT TGGGGAGGAG TCCAGGGAGC CCAGCACAGG 120  
 TGACAAATC CGGGAATTCT TGCTGAGCCT CAGATACTTT CGAATCTTCA TCGCCCTGTG 180  
 35 GNACATCTTC ATGATGTTCT NCATGATTGT NCTGTTCCGGC TCTTGAATCC CAGCGATGAA 240  
 ACCAGGAACT CACTTTCCAN 260

SEQ ID NO:7067  
 SEQUENCE LENGTH:154  
 40 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08303  
 SEQUENCE DESCRIPTION:  
 GATCGAAAGA AGNACATCAT GAAAAATAAA TGAACTTTGC TTAGTGGATT GACTCCTTTG 60  
 45 CTGAAGTCAG TTATTCATCA AGAATGCAAT TAGNCTAATT GTGAATAAAT GATTGNNTGA 120  
 AGNTATAATA AATAAAACCG TAAACTCTGG CAAA 154

50 SEQ ID NO:7068

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EP 0 679 716 A1

SEQUENCE LENGTH:29  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
5 CLONE:HUMGS08304  
SEQUENCE DESCRIPTION:  
GATCAATAAA ATGTGATTTT NCTGATAAA 29

10 SEQ ID NO:7069  
SEQUENCE LENGTH:74  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08305  
15 SEQUENCE DESCRIPTION:  
GATCGTCCCA TCACAGTGTT GTTAATGTTT GCTGTATTTA TTAATTTNCT TAAAGTGAAA 60  
TCTGAAAAAT GAAA 74

20 SEQ ID NO:7070  
SEQUENCE LENGTH:264  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08306  
25 SEQUENCE DESCRIPTION:  
GATCTGGCTT CACAGACAGT TGACACATCT AAAAGAATCT TTGTTTCCAA CTGGACTGAC 60  
TCATTGAGAG GAAACCTTCA CTGCACCTCA CCAAGTGCAGA CAGAAGACCT GGAGGCAGGA 120  
CGGGAGGCAT TTTATACTTC AGCACGATAT GGGCCCTGAC TTTTCATTTT CTACATGGAG 180  
ACATATTGCT GGAGGCTCAT CATCCTGAGG GGAGAAACAT GGATTTCATG GTTTTGCCAT 240  
30 AAAAGTATGC AACAAAGAGT TCCN 264

35 SEQ ID NO:7071  
SEQUENCE LENGTH:27  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08307  
SEQUENCE DESCRIPTION:  
40 GATCANTAAA AAAAATAAAT AATTAAA 27

45 SEQ ID NO:7072  
SEQUENCE LENGTH:175  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08308  
SEQUENCE DESCRIPTION:  
GATCTNTTTT NTCTGGAGTC CTGGAGTTNC TTTCCTAAGG TTAAATATAA GCAAGCNCCA 60  
GAAAGAATGC TGACAGAAAA GGGACCCCTAG CTGTGGTAGG AAGTGGCCCT CAGAGTCAAG 120  
50 GAGGCAGGAT GANTTTAAAT NCTNCATGTA GGGCATATTT TGGGGAGTNA TGGGN 175

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EP 0 679 716 A1

SEQ ID NO:7073  
SEQUENCE LENGTH:281  
SEQUENCE TYPE:nucleic acid  
5 TOPOLOGY:linear  
CLONE:HUMGS08309  
SEQUENCE DESCRIPTION:  
GATCGACTTT AAGTTGCTTC GGGTCTAGTA GAAATCCGGT TATTTCCAAG CCTGTNAAAT 60  
10 GTGAAGTTCA AGAAAAATGA ATCCGTGTAT AGCAAAACCA TTTTNTCTCA CAATTTTTTA 120  
ACCAATGAAC ATTGTGTGGG AAATTNATTC CATATGTTTT CAAGTCATTT ATGCAACTTG 180  
AATAATTAAA ATATTCATTG GTAAGAGCTG CCTGATGTCT TTAAAGTCAG GAAATTGTCT 240  
TATGCCAAAA GTAGACAANC TCAAACACCA AAAGGTCANN N 281

15 SEQ ID NO:7074  
SEQUENCE LENGTH:106  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08310  
20 SEQUENCE DESCRIPTION:  
GATCATTTTT CTTGGAGGNT GGAGATTGGC TAGTACCTCT GGCCTAACTG TGTAGGTCAA 60  
TACTCTTTTA CATTGCCTTC TAATAAAAGC AGNATGATNC AGCAAA 106

25 SEQ ID NO:7075  
SEQUENCE LENGTH:69  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08311  
30 SEQUENCE DESCRIPTION:  
GATCTTGTGT CTGTTGTGCC TGAATTTGGC GTGTCTAATA AAGGCCCATG CACACTATAG 60  
GCACTCAAA 69

35 SEQ ID NO:7076  
SEQUENCE LENGTH:292  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08312  
40 SEQUENCE DESCRIPTION:  
GATCAGTGAA ATNTTAACT CCCACGGTAA CATCATGCCT ATGGACATTA AAGGAATAGC 60  
AAGGACTTGC TCCCACGACT TCACATTTGC TCCCCTGGC CAGGAATGTG GGCTCTTAGT 120  
GATTCCAGAT AAGGGCAAAG CTGGGGCCCA ATGTATGTAG CCAAATTGNA GNAATCATGG 180  
45 NGCACAGGCA AATGGTGACA TGAATTTGTA ANCTGTGTTT ATGTGTTNTT ATATTTATAT 240  
TTCTGANCTC AGTACATGTT AATATTTAAN TAATTATGCA GTAACTTTCA AA 292

50 SEQ ID NO:7077  
SEQUENCE LENGTH:29

55

SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08313  
 SEQUENCE DESCRIPTION:  
 GATCCTGCAC TCTAGCACAT GACTCCAAA

29

SEQ ID NO:7078  
 SEQUENCE LENGTH:334  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08314  
 SEQUENCE DESCRIPTION:

GATCCCCTGT CCCCTGGGGC TGGTGGATAG GGCAGAATCC TGGGCCCCCA GAGACCTTTG 60  
 CCCACACACA CTCCTTCCCC TTGTCCCTGG GGNACTCCCC CAGGATTGTG CAATAGTCAG 120  
 AGTGTCCCTT TTTGCAGGGG ACTGGGCCAT GGGTCCTAGG CCCATCTGTC CATCCTCCTC 180  
 TCCATGCAAG TGCTGTTTGG GCAGNAGTCA CCATGCAAGG GTGNCATCGN CANCCACGTA 240  
 CCAAGNCACC GCAGCTGCTG CCACTCTGCT GCCTGTACAG AAGGAANCTG NATCTTTTNN 300  
 ATATTCTAAT AAAATNACTG TGGGNTTNA NAAA 334

SEQ ID NO:7079  
 SEQUENCE LENGTH:245  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08315  
 SEQUENCE DESCRIPTION:

GATCCCGTAA ATTGAAGGCA ACAAGGTCTT GGTCTNCAG TAAGGGGGGC ATGGAGCCCT 60  
 GGTGGGAAGG AAAGAAGNGA AATTGTGTT CCTGATTCCT TAATCCCCAN GAAAGGTCCC 120  
 TCTGCTAACA TTCACATATC TNTCCTAGC CAAAGTCTGT CCATTTNAAC CCTNTAGCAT 180  
 CTGAGCTATC TGCATCCAGN TTTCAAANAT ATTCGNTGT TACTAACAT GTNTGTNAGC 240  
 CTNTN 245

SEQ ID NO:7080  
 SEQUENCE LENGTH:88  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08316  
 SEQUENCE DESCRIPTION:

GATCACAAAT NACTTGTTGA AATGTAAGGC AGTCCCCCTC CTCCTCTTTA TCTACATTAC 60  
 TTCCCGAAAA TAAATGCANA TTAATAAA 88

SEQ ID NO:7081  
 SEQUENCE LENGTH:149  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08317

## SEQUENCE DESCRIPTION:

GATCAGGTCA CAGTGTGTAC GTAAGAGTCA GCTNCTTATG GNTATTGTCA TCTAGGTAAC 60  
 TTTGTAAAAA AACAAACAAA ACTGGCATTG TTAATTCCAA AAAGAAAAAA AAAAGCAGTA 120  
 5 AAAANAAANG GNCATTTGNA CCNCCGGCN 149

SEQ ID NO:7082

SEQUENCE LENGTH:312

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08318

## SEQUENCE DESCRIPTION:

GATCTCAGCC TCGGGTGGTC AGGGTGGGAA ATGATAGGAA GAAGCTGTCA TCTGCATCCT 60  
 15 AGTTTGCCTG AAATGAACCC AAATAATACC CATTATTATT AGTCCTGAAT TATGAGTAGT 120  
 GAATGATACC CATCATTCTG GCATCATGAT GAGTAGTGTC CACTTCCATT CTGAAAAGTG 180  
 CCCTGCTGTG AAAAATAAAT TATATAGTCC TCCTAGGTAA ATGAAGGAGG AGGGAGAAGT 240  
 GTGAAAGAGT ATGGCTTAAA TCAGACAAGA TATACAAGAA GATACTTTAT ATAGGGCAGG 300  
 20 AGCGGTGGCT TN 312

SEQ ID NO:7083

SEQUENCE LENGTH:87

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08319

## SEQUENCE DESCRIPTION:

GATCTGGGAA ACTGATTGAA TAATACACTT TTCTTGCTTT GGTGCTCAAA GTGGTTTTTT 60  
 30 TCCCCCAATA AAATTATTTA ATTGAAA 87

SEQ ID NO:7084

SEQUENCE LENGTH:312

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08320

## SEQUENCE DESCRIPTION:

GATCAGGAAA TGCATCTNCG CAGATGGTAT TTCCTTCAGA AAAGACTTTN CTACTTTAAA 60  
 40 TATAAATNAN GCCATAACAG TTTTCATGCTG TGGAAAGAGG GTGAAAAGGT TCATTTTAAG 120  
 AGATTATATA ATANGACCTT NCACATTTC TGTGAAATGT CTAACCTTNC CAGTNCTTCA 180  
 GCAAGTTTTT TTGGGGGGTG ATGGGGAGNN GGTAGTATTG GTTTTAGAGG TTTCAAATCT 240  
 GTGANCTTTG GAGAGGGGAC AGTTGTTGGC TCTGGTATTT CCTAGTTTGT TAGTAACGTT 300  
 TTGCTAGCCN NN 312

SEQ ID NO:7085

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08321

## SEQUENCE DESCRIPTION:

5 GATCTGATGG TTTTAAAAAG GGGTGTCTCC CTGCACAAAC TCATTCTCTG TTTGCCTACC 60  
 GCCATCCGCT TAAGATGTGA CCTGCTCCTC CTTGCCTTCC GCCGCGATTG TNAGGCCTCC 120  
 TCAGCTATGT GGAAGTGTAA ATCGAATTAA ACCTCTTTCT TTTGTAAA 168

SEQ ID NO:7086

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS08322

## SEQUENCE DESCRIPTION:

15 GATCCATGTG TTTTACTCTA AAGTGCTAAA TATGGGAGTT TCCTTTTTTT ACTCTTTGTC 60  
 ACTGATGACA CAACAGAAAA GAAACTGTAG ACCTTGGGAC AATCAACATT TAAATAAACT 120  
 TTATAATTAT TTTTCAAAC TTAAAA 146

SEQ ID NO:7087

SEQUENCE LENGTH:314

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS08323

## SEQUENCE DESCRIPTION:

25 GATCAATAAA GCTGTCTAC ACTTGTGCTA GGNAGGCACC GCTGTGACTG GGCTCCGGGC 60  
 CTTTCCACTA CGTTGAAGAA GAAAACCTAT TTTTAAATGT AAATAAAATA TCTGGTAGCC 120  
 TGTGTGGAAA GCTGACCGTT TTAAGAAGTG GCATGTGCCT TGAAAGGGGG CAGAATGTTC 180  
 AGTCGGTCGT GTTTTAAACA CAGAGTCTCT AGAAGAGGTG CAGACATCCC GTCTGACTGT 240  
 CCCTGTGGAC TCTCTAGTT GTATGTTGCT ATAATCCTCC AAATCAAAGC TCTTCTGCT 300  
 30 TGTGCAAGAT TNNN 314

SEQ ID NO:7088

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

35

TOPOLOGY:linear

CLONE:HUMGS08324

## SEQUENCE DESCRIPTION:

40 GATCTTACTG AATTTATTTT GTAAATGCCT AATGAGGCAG ATTTTGAAT TAAAGAAATG 60  
 CTACATGTAA A 71

SEQ ID NO:7089

SEQUENCE LENGTH:412

SEQUENCE TYPE:nucleic acid

45

TOPOLOGY:linear

CLONE:HUMGS08325

## SEQUENCE DESCRIPTION:

50 GATCCTAACA TATCAGGACA TGGACTCAGG ACCTGCCCCG TGATGCTGTT GATTTCTCAA 60  
 AGGTCTTCCA AACTCAACA GAGCCAGAAG TAGCCGCCCG CTCAGCGGCT CAGGTGCCAG 120

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5 CTCTGTTCTG ATTCACCAGG GGTCCGTCAG TAGTCATTGC CACCCGCGGG GCACCTCCCT 180  
 GGCCACACGC CTGTTCCCAG CAAGTGCTGA AACTCACTAG ACCGTCTGCC TGTTCGAAA 240  
 TGGGGAAAGC GTGCGTGGCG GTTATTTAIT TAAGTGCGCC TGTGTGCGCG GGTGTGGGAG 300  
 CACACTTTGC AAAGCCACAG CGTTTCTGGT TTTGGGTGTA CAGTCTTTGT GTGCCTGGCG 360  
 AGAAGAATAT TTTCTATTN TTTTAAGTCA TTTCATGGTT TCCTGGTCCT GN 412

10 SEQ ID NO:7090  
 SEQUENCE LENGTH:91  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08326  
 15 SEQUENCE DESCRIPTION:  
 GATCTATTTT TGGCTTATGT CTTTAAATAC TACTCTCTT CTCTGAATTT TGAATATGA 60  
 AGTAAATCT AGCCCATTTG TTTTATGCAA A 91

20 SEQ ID NO:7091  
 SEQUENCE LENGTH:294  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08327  
 25 SEQUENCE DESCRIPTION:  
 GATCTCAAGA GTTCAAGACC AGCCTGGGCA ATATGGTGAA ACCCGTTTGT ATTAAAAATA 60  
 CAAAAATTAG CTGTGCATGG TGGCCACACG CTGTAATCCC AGCTACTCAG GAAGCTGAGG 120  
 TCCGAGAATC ACTTGAATGC TTGAACTCGG GAGGCAGAAG TTGCTGTGAG CCGAGATGGC 180  
 ATCACTGCGC TCCAGCCTGG GCAACAGAGA GAGACTGTCT CCACTGTCTC CAAAAAAAAA 240  
 30 NGAAAAAAAAA AAGTTGTTN GATTCTNTGGC CCTCAAGGAA ATTNTGGAAA ANAN 294

35 SEQ ID NO:7092  
 SEQUENCE LENGTH:79  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08328  
 SEQUENCE DESCRIPTION:  
 GATCATGTTT TGAAGCAGCA GGTCCAGGTC ACTTTGTATA TAGAATTTTG CTGTATTCAA 60  
 40 TAAATCTGTT TGGAGGAAA 79

45 SEQ ID NO:7093  
 SEQUENCE LENGTH:122  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08329  
 SEQUENCE DESCRIPTION:  
 GATCTTTCCC TAGAGAATGT AACATACGTT TTTATTCATT TAATCACTTC ATTATGCCGG 60  
 50 GGTTAATNAT GTTTATTTTA TAATTGGTAA TAAAGGCCAC ATTTATTTT GTAACGTGA 120  
 AA 122

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SEQ ID NO:7094  
 SEQUENCE LENGTH:50  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08330  
 SEQUENCE DESCRIPTION:  
 GATCTTAAAC TCTTTGATTA AAAATAATAA ATGGAAATGT GTTAAGCAAA 50

SEQ ID NO:7095  
 SEQUENCE LENGTH:77  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08331  
 SEQUENCE DESCRIPTION:  
 GATCCAGGGA TTTGGGAAA AGGAAGGAAT TTGATGTTT TTGGGGTGGG AGGGGAGGGT 60  
 GTGTTTTTTA CACCAAA 77

SEQ ID NO:7096  
 SEQUENCE LENGTH:186  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08332  
 SEQUENCE DESCRIPTION:  
 GATCGCTGGC CTTCTGACT TAACATTNAT GCATGCCAAG GTGTTGATGT TCCCAGCCAC 60  
 GTTAACACCT TCCACAAGNT CTCAAGAAAA AGCAGACGGA TAACTGATGT GAATTGGACA 120  
 GTTCTATTG CTTTCTCTT TTTCCATCCC TTCCCTACCA TCAAAAGCAT ACCTGCTCTA 180  
 ATTAAT 186

SEQ ID NO:7097  
 SEQUENCE LENGTH:291  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08333  
 SEQUENCE DESCRIPTION:  
 GATCATATAC TCTGCTGTGG TCATGCCCAC TCTTTGGGAG TATATCCCT TTATATATAT 60  
 TGAGTATTGT ACCACTTGAG AAATTCCTTT GTTCTGTTAT ACAAATTA TCTTTCTGCT 120  
 CATAATGATT GATGATACCA CCAGTAAAA TAGGATGTTT ACCCCAAAAC AAGTGCAAT 180  
 TAAGAATTG AACACAACCA CATTTTTTAA AATGAACTT CTATCGGAAG TAAATTAATT 240  
 TNGGTAATA AAGTCCAGTA TTNGGNAAA TGTACAATGT TAAATCTCAA A 291

SEQ ID NO:7098  
 SEQUENCE LENGTH:307  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear



CLONE:HUMGS08334

SEQUENCE DESCRIPTION:

5 GATCAGACTT TTGTNTCTTG GGTCCCAGAT GGCACAGGAG CACTGCATGC TTGTTTTCTA 60  
 GAGCCCAGCC AGTCATGGGT GCTAGCCTAG TCTCCACACA CCAGCAAGTA GAACCCAAGT 120  
 GTANNNNNAT AAATATTTC TGAGTACCAG TAAGAGAATG CATTCTTTTC TCATCTAGGC 180  
 CAGGAATGTT GAAAATGCTC AGCCTTACAT AGAAACTCCT AGATTTTCAC TAACGCATTT 240  
 CACAAAAGTA AATAAGTATT TCATATAATT CAGAGGATGT TTAAATTGTC AGCATTTTAA 300  
 TAAATAN 307

SEQ ID NO:7099

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS08335

SEQUENCE DESCRIPTION:

20 GATCTGTA CT TTGAACAAAG AAAGTGTGTA GAGACCCCTG GGAGTGAGGG GTAGGGGATA 60  
 CAATACTCTG AAGCAGAAGA GGACCCCTGC AGTGATGGTT AGGGACTCTT CTGAGTAGGA 120  
 GACGTAATCG GCTTTTGCTC CATGGAACCT TTACCACATG TATTCAGCAT ATATACACGA 180  
 TTAAAGTGCT GCAAATAAA 199

SEQ ID NO:7100

25 SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08336

SEQUENCE DESCRIPTION:

30 GATCTGGGAG TGGCTTCCTA ACGGAAATGG AACAGGATTA CCAACTAGTN GACGAAAGTA 60  
 ATGCTTTCCA TGACAACCTT AGGTCTCTTG ACAGNAATCT GCCCTCAGAC AGCCAGGACT 120  
 TGGGTCAACA TGGATTAGAA GAGGATTNA TGTATAAAA GAGGATTTTC CCACCTTGAC 180  
 ACCAGGCAAT GTAGTTAGCA TATTTANNGT ACCATGGTTA TATGATTAAT CTGGGGACAA 240  
 AGAATTTNAT AGAAATTTT AAACATCTGA AAAAGAAGCT TAAGTTTAT CATCCTN 297

SEQ ID NO:7101

SEQUENCE LENGTH:296

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS08337

SEQUENCE DESCRIPTION:

45 GATCTTTGTC TGTGAAGAAG AAAATTATCT CCCTAGTTCA ATCTGTAGTG AAATAAGGCT 60  
 ACAGAAGGCA TTGTTTTTTC CTTTTNATT TTTGTATTA TATATTNCC TTAAATATGT 120  
 TTTATTGTCT TCTCTANGCA AAAAGTTCTT AATAANCATA GTATTTCTCT CTGCGTCCTA 180  
 TTTCAATAGT GAAGACATAG TTCACCTAAA ATGGCATCCT GCTCTGAATC TAGNCTTTTT 240  
 AGAAATGGCA TATGGTTTTG ATGATATGNC CACCATCCAA AATGTCCGAN TNAATN 296

50 SEQ ID NO:7102

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SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

5 CLONE:HUMGS08338

SEQUENCE DESCRIPTION:

GATCAACTTT AAGAAGATT ACAAAACGCT CAAGAAAGAN GAGGATATCC NACTNTTCCC 60  
 CGTGCAGACA AAATACATGG ATGTGGTCAA NGAGTGAATC CGTTTAGCTC GACAGATTGA 120  
 10 GAAATCTGAG TATCGGAACT TCCAGGCTTG CCTNCACAAC TCTTGGATTG AGCAGGCAGC 180  
 AGCTGCCCTG GAGATTGAGC TGGAAAGANGA CATGTATAAG GNAGGAAAAG CTNNCCAGCA 240  
 AGAAGAACGT CGGNGACAAA AGCAGATGGN GGTCTNGAA GAAGGAGCTG CGNCNCCTGC 300  
 TTNTN 305

15 SEQ ID NO:7103

SEQUENCE LENGTH:414

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20 CLONE:HUMGS08339

SEQUENCE DESCRIPTION:

GATCCACAAG TCCTTGTTCC ACTGTGCCTT GGTTCCTCTT TTATTCTAA GTGGAAAAAG 60  
 TATTAGCCAC CATCTNACCT CACAGTGATG TTGTGAGGAC ATGTGGAAGC ACTTTAAGTT 120  
 TTTTCATCAT AACATAAATN ATTTTCAAGT GTAACTTATT AACCTATTTA TTATTTATGT 180  
 25 ATTTATTAA GCATCAAATA TTTGTGCAAG AATTTGGAAA AATAGANGAT GAATCATTGA 240  
 TTGANTAGTT ATAAAGATGT TATAGTAAAT TNATTTTATT TTAGATATTA AATGATGTTT 300  
 TATTAGGATA AATTTCAATC AGGGTTTTTN GGATTAANCA ACCANCCAAT TGGGTCCCCA 360  
 GTTAANTTTC CATTTCAGAT ANCCACCANN TAGTTTCNNN GTNTAGGTCC ATTN 414

30 SEQ ID NO:7104

SEQUENCE LENGTH:252

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS08340

SEQUENCE DESCRIPTION:

GATCCCCTGA CTGGCTGGGG GCAGCTCCCA GGATATCCTG CCTTCCAAC TTTTCTGAAG 60  
 CGCCTCCTCC TAACATGGCG ATTCCGGAGG TCAAGNNCNT GGGCTCTCCC CAGGGTCTAA 120  
 CGGTTAAGGT GACCACATAC CAGTGCCAAG GGGNTTNTAA AGTGGTGATG TAGTTNTGCT 180  
 40 CCCCTCCCCA AGAGCGGGTG GNGGGGGGTT NAANATGTTT GGCCTGNNTA AGTGGGCCTT 240  
 CCCATTNAAG TN 252

SEQ ID NO:7105

SEQUENCE LENGTH:318

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

45 CLONE:HUMGS08341

SEQUENCE DESCRIPTION:

50 GATCTTATTT TTTAATTTTA AGTGCCACTA TTAATGTAAA AAGGGGGGGG CTCTACAGCA 60

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5 GTCGTGATGA AACTTAAATA TATATCCTTT GTCCTCGAGA TTTTAGGAAG GGTGTAGGGT 120  
 GAGTAGGCCA TTTTNAATTN CTGAAGTGCT AAGTGTTTT ATACAGCAAA CAAAAAGTCA 180  
 ATTTTCCTTT CCACCAGTGC GAGAGAGGAT GTATACTTN CAAGAGAGAT GATTGCCTAT 240  
 TTNCCGTTTG ACAGAGTCCC GTAGATGAGC AATGGGGAAC TGGTTGCCAG GGTCTAANTT 300  
 TGGATTGATT TATGCACN 318

10 SEQ ID NO:7106  
 SEQUENCE LENGTH:299  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08342  
 SEQUENCE DESCRIPTION:  
 15 GATCTGTGAC CCCAGCCATG AGGACCCTCG CCATCCTTGC TGCCATTCTC CTGGTGGCCC 60  
 TGCAGGCCCA GGCTGAGCCA CTCCAGGCAA GAGCTGATGA GGTGCTGCA GCCCGGAGC 120  
 AGATTGCAGC GGACATCCCA GAAGTGGTTG TTTCCCTTGC ATGGGACGAA AGCTTGGCTC 180  
 CAAAGCATCC AGGCTCAAGG AAAAACATGG CCTGCTATTG CAGAATACCA GCGTGCATTG 240  
 20 CAGGAGAACG TCGCTATGGA ACCTGCATCT ACCAGGGAAG ACTCTGGGCA TTCTGCTTN 299

25 SEQ ID NO:7107  
 SEQUENCE LENGTH:302  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08343  
 SEQUENCE DESCRIPTION:  
 30 GATCTTAGAG GTTGAAGCCC ACCTTCTCTT TTCACATAGG AGGGAACAGA CCATGGAAAT 60  
 TTAACGACT TCCTCAGGT CACAGAACTA GTTTTTAAT CCTCAGGCAG TGNATCCCC 120  
 CACCCTACAA CTGTGCACAA CCTCTTCC CACAGTGCAA TTCAGAATAT GCTCAGGGAA 180  
 TGCCAGGCAC CTTGTAAAAC TGCTGGGAGA AAAGCATGNT TCCCACAAGG ACTAAGTATC 240  
 AGTGATTGT AATTTTCCTG TTTGTATTA TCTGCTTGC TGATGTAGAC AAGAGTTAAC 300  
 TN 302

35 SEQ ID NO:7108  
 SEQUENCE LENGTH:110  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 40 CLONE:HUMGS08344  
 SEQUENCE DESCRIPTION:  
 GATCNAACTG TCTCACTGCT TTTCCAACTA TAATCATNTC GCTCTNACTT TAACAAAAGG 60  
 CGATGGCACA GTAATTTAGT AAATTTNTGT AATAACATNT AAAAAAAGN 110

45 SEQ ID NO:7109  
 SEQUENCE LENGTH:121  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 50 CLONE:HUMGS08345

55

## SEQUENCE DESCRIPTION:

GATCTGTCT AAAAAAGAAA AGAAAAGAAA AGAAAAGAAA AGAAAATCAG CATTGTATCC 60  
 CCAGAACCTG CTACAGTGTA CTGTACACTT AATAAATATT GGTGAATGA ATGAACTGAA 120  
 A 121

SEQ ID NO:7110

SEQUENCE LENGTH:99

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08346

## SEQUENCE DESCRIPTION:

GATCATCAGT AAATTTGTCA TGTTATATAT TTATTTTTTT ATAAATCAAG ACTTCTGTGT 60  
 GCTCTTAAAT ATATTAAAA CAATTACAT TTCAGGAAA 99

SEQ ID NO:7111

SEQUENCE LENGTH:92

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08347

## SEQUENCE DESCRIPTION:

GATCCCAGNA GGAGGGAAGA AAATTTCAG TGAAGTAAAA CAGTAAAAAA AAAAAAATA 60  
 ATGTATAAAA AAGTTGCATT ACACAGTNCA AA 92

SEQ ID NO:7112

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08348

## SEQUENCE DESCRIPTION:

GATCATTCTN GTTGATACCC TTCTTTGAAT ATTCTAGTGT ATTAATATAC CATTGGTTAT 60  
 TNAATCATGT CTNATTAATG GACTGGCTGT TTTCACATAT TNGATATATC AAGTGTCTTC 120  
 ACAACTTGTG CTTGCATATT CTTTCCCAAA ATATTGAAAG TCCATATATT TCCTGTGACA 180  
 TTTTAAAGT TGATATCTNA ATNTNTCATT GTAGTNGCAA AGCATGTAAT TNCTTGGGGG 240  
 AGGGGGGCTG TAAATATTGA CATTTTAAAA TAAACTTTT AAATCAGCCT TAAATGTATC 300  
 AGGN 304

SEQ ID NO:7113

SEQUENCE LENGTH:309

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08349

## SEQUENCE DESCRIPTION:

GATCAAAATTT CACGTCGTCT TCTGTATACT GTGGAGGTAC ACTCTTNTAG AAAGTNCAAA 60  
 AAGTCTACGC TCTNCTTTCT TTCTAACTCC AGTGAAGTAA TGGGGTCCTG CTCAAGTTGA 120  
 AAGAGTCCTA TTTGCACTGT AGCCTCGCCG TCTGTGAATT GGACCATCCT ATTTAACTGG 180

CTTCAGCCTC CCNACCTTCT TCAGCCACCT CTCTTTTCA GTTGGCTGAC TTCCACACCT 240  
 AGCATCTCAT GAGTGCCAAG CAAAAGGAGA GAAGAGAGAA ATAGCCTGCG CTGTTTTTTT 300  
 AGTTTGNNN 309

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SEQ ID NO:7114  
 SEQUENCE LENGTH:282  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS08350

SEQUENCE DESCRIPTION:

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GATCTTCCCC AGCTATGAAG CCTATCTTGG AATGGGAAAC CATGAAATTT GTCTTTTAAA 60  
 AGAAAGGGAA GAAATAGCCT TACAGCCCCT GTTCCTCCAA GTGCACATTT AGCCTTAAAA 120  
 TCCTGGGAGT CGGGAGACAC CGTGGAGTCC TTACATCCAC AGTGTCTGCT GGTGCTGGTC 180  
 AGAAGGCAGT AATGCAAGAG TCCTTTTGTG AAGAGTGTTT CTATGTAGAG ATGTTTATAT 240  
 TTAAGTAGTT CTTTATAAA TAAAAGCATT TCTAATGGCA AA 282

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SEQ ID NO:7115  
 SEQUENCE LENGTH:27  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS08351

SEQUENCE DESCRIPTION:

GATCTGTTTT CTGTAACTTT TGCTAAA

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SEQ ID NO:7116  
 SEQUENCE LENGTH:251  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS08352

SEQUENCE DESCRIPTION:

GATCTTAGGC TTCAGCTCTT TATCTTACAC CTTGAGACCC CAAGAGAGTC CCAAATTCCT 60  
 GGAAAGGCAG CATCACAGAG TGGGAAATA CAGGACTTGG CTTTAGGTTC TAGTCCTTAA 120  
 CACAGCTTCT TCCTTGCTGT GTGTTCTTG GTAGGTCAC AAATCTCTCT GAGCCTCAAA 180  
 TTTCTTATCT CTAGGTTGAA AAATAAATA AAGTCCCAT GCCAATCAGT GCAAGGAATC 240  
 TGTGAGATAA A 251

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SEQ ID NO:7117  
 SEQUENCE LENGTH:123  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS08353

SEQUENCE DESCRIPTION:

GATCACGCCA CGGCACTCCA CCCTGGGCGA CAGAGCGAGA CCTGTCTCA GAAAAATCT 60  
 GTGAGGTAA AAGGCTGTGT GTGTGAAAT ATCTTGAAA TTGTAAAGAA CTACACAANT 120  
 AAA 123

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SEQ ID NO:7118  
SEQUENCE LENGTH:295  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08354  
SEQUENCE DESCRIPTION:  
GATCATTCAT CAACATGTGT CTCTNAATTT AATTCAGTAG TTGTAATTAT TCTTTGGTTT 60  
AGACCAAGAA AAAGGAAATC CCCCCTTTNA ATGTATTCCT TGGTTTNAGG ACATGACTCC 120  
TGTAAGGNAG AGGAAAGGGA GATGCTTCCT GTTTGANCTG CAGTGAATTC ACGGTTCTTG 180  
TTTCACCACT CCAAACCTTA TGGCGACTCA CACACACATT CCTCTTTNCT GTTACTGCCA 240  
AAGGTTCTGGG TTAGTACAC TTCAGTTCCA CTCAGCATT GAAAAGGTTT TCGTN 295

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SEQ ID NO:7119  
SEQUENCE LENGTH:203  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08355  
SEQUENCE DESCRIPTION:  
GATCCCCAGG ATGCCCACTT CCCTCCACCC CCACACCCCA GCCGTGTCCC TAACCCCTGG 60  
CAACCAGGAA TCCACTCTCC ATTTCTATAA TGTTGNNATT TCAAGAATGT TATTCAATGG 120  
AATCATATAG TATGTAACCT GTTTTGAGCT TAAAAAATAA GTATACATGA CTTTAATGAG 180  
GAAANTAAAA NTGGATATTG AAA 203

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SEQ ID NO:7120  
SEQUENCE LENGTH:82  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08356  
SEQUENCE DESCRIPTION:  
GATCCGTTAG TGTCTGTTTA GAAAAGATGT TATAAACTTA CAGAAACAAA TATAATAAAC 60  
TGAAGCAGAT TTGAAAAGCA AA 82

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SEQ ID NO:7121  
SEQUENCE LENGTH:79  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08357  
SEQUENCE DESCRIPTION:  
GATCTTTTGC ATTGCAGAGA TTTTATATAT ATTTTGTGTTG TAATGAGCCA TTCTCAATAA 60  
ACATTATTCT CACTGCAAA 79

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SEQ ID NO:7122  
SEQUENCE LENGTH:299  
SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear  
 CLONE:HUMGS08358  
 SEQUENCE DESCRIPTION:  
 5 GATCCCTAGT AACTCCTTC TTCACITTTA CTGTCAGATT TACAAAGGTC CTCCCATTGC 60  
 AAAGCAGTGN NNNTCCTAAT TTATATATTG TTTNCTAGT TCATTTTGTG TTTCCAACTT 120  
 TTCATGTAAA ATTTTAATTA TTTTGAATG TGTGGATGTG AGACTGAGGT GCCTTTTGGT 180  
 ACTGAAATNC TTTTCCATG TACCTGAAGT GTTACTTTTG TGATATAGGA AATCCTTGTA 240  
 10 TATATACTTN ATTGGTCCCT AGGCTTCCTA TTTNGTNACC TTGCTTNNNN NGTGGCANN 299

SEQ ID NO:7123  
 SEQUENCE LENGTH:108  
 SEQUENCE TYPE:nucleic acid  
 15 TOPOLOGY:linear  
 CLONE:HUMGS08359  
 SEQUENCE DESCRIPTION:  
 GATCATGTGC CAAGGCTGCG GTGCGTTCTG TCACGATGAC TGTATTGGAC CCTCAAAGCT 60  
 20 CTGTGTATTG TNCCTTGTGG TGAGATAATA AATTATGGCC ATGGGAAA 108

SEQ ID NO:7124  
 SEQUENCE LENGTH:113  
 SEQUENCE TYPE:nucleic acid  
 25 TOPOLOGY:linear  
 CLONE:HUMGS08360  
 SEQUENCE DESCRIPTION:  
 GATCAGACTG TGCTTTCTAA TTCTAAAAA TTGAGCAGTG TTGGTATTCT TNCAGTATTT 60  
 30 TTNCTCTCAC CTGGAAAACT ACCTGGAAGT TGTGAGGCAT TTNCTTACTG NNN 113

SEQ ID NO:7125  
 SEQUENCE LENGTH:125  
 SEQUENCE TYPE:nucleic acid  
 35 TOPOLOGY:linear  
 CLONE:HUMGS08361  
 SEQUENCE DESCRIPTION:  
 GATCTCTAAG TAATTNTNCA AAATCCGGTA TTACTATGTC AAGTTATTGC TTTTGGTAAA 60  
 40 TTCATCTGAC CCAGTTATAA ATGAAAGANT ATGGANTTAA AAATTTTAAA NCTAAATAAT 120  
 TTGNN 125

SEQ ID NO:7126  
 SEQUENCE LENGTH:122  
 SEQUENCE TYPE:nucleic acid  
 45 TOPOLOGY:linear  
 CLONE:HUMGS08362  
 SEQUENCE DESCRIPTION:  
 GATCATGCTC CATCCAGCCC CACCCAAATGG CCTTTTGTGC TTGTTTCCTA TAACTTCAGT 60  
 50 ATTGTAAACT AGTTTTTGGT TTGCAGTTTT TGTGTGTGTT TATAGACACT CTTGGGTGTA 120

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5 SEQ ID NO:7127  
 SEQUENCE LENGTH:256  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08363  
 10 SEQUENCE DESCRIPTION:  
 GATCGGCACT CACGATTGTN ATGTTGGCTA CATCCTTGAC AAAGCCGATG GCCTTTCCAG 60  
 GTTGGAACCT GCAATAACCA TCCTGTTGAG GATGCAAAGG GCATGAAATA CAGGTTATGG 120  
 ACCCGAAGTC TCAGCCTCCC CACGCAGTTC AATAACATTT ACTAAACAAA ACAAGATGTG 180  
 15 CCAGGGCCTG GGGGATGGGA TAATTCAGA GAGAATTAAG GCATCCTTGT CCTCAAGGAG 240  
 CTTAGGGTCT GGTAAA 256

SEQ ID NO:7128  
 SEQUENCE LENGTH:346  
 20 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08364  
 SEQUENCE DESCRIPTION:  
 25 GATCAACAGG GGTGAAAAGA ACCACCCTGA GGTTCCTATG CCTCTCCCAN NTTAGTGGT 60  
 AGNATTTTGT GTCCTTACTC CACCCTTCAC CCTAGTTCCA CCAAGGTTCA CACACCAGAT 120  
 GTAAGTGTG TNNAGCTGAG TTGTATGGAT TAACTTCAGT CCACTGTAAA TACACCTGGG 180  
 ATGGGGTGGG GTTGGGGTTG TTTAGGGAGA AGCAGCCAGA CTTGCTTTGT GAACTGAATG 240  
 TATTTTATG CAATTTTGG TGGCCTTTCA ACCCTAAGAT GAATGGTTTT GTTTTACTGG 300  
 30 TTGTTGTTAT ATAGTTTGA GTATTCTGTG TTTGAAAGTT TGGGTN 346

SEQ ID NO:7129  
 SEQUENCE LENGTH:42  
 35 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08365  
 SEQUENCE DESCRIPTION:  
 GATCGTGTCT CTGATAAAG AATAAAGCT GTTTATTGCA AA 42

40 SEQ ID NO:7130  
 SEQUENCE LENGTH:338  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 45 CLONE:HUMGS08366  
 SEQUENCE DESCRIPTION:  
 GATCTTAGGT CCCACTCANG GTCCTAACTG GCTATGGCCA CAGCTGGAAC TACCCGAGAA 60  
 GNCTTTTGTG CATGTTTGGT AGCCGTAGCA CAAGTGATTG GAGTAGAACA TGCTACTGCT 120  
 50 GTACATTTT AACTCCCCTA ATGGTGTGTC TATAATTNTN AAATCTAAGG GGGGGGGCTC 180  
 AGTAAAGCCT CCTGGCACCA GGCCTTCCTG CTCGACTGAA AAAAATTCN TCTTTGAAAA 240

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TCCCTTTTA CTCATGGCCC ACAGTAGAAT ATCCAAAACG CCTTGGCTTT CAGGCCTGGC 300  
 CTTTCCTACA GGGAGCTCAG TAACCTGGAC GGCTCTAN 338

5 SEQ ID NO:7131  
 SEQUENCE LENGTH:294  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08367  
 10 SEQUENCE DESCRIPTION:  
 GATCTTTTCA AGATGCATTC CAGATGAACT GCTAGGTGAG GGGGAAGCTT CATTITTGTT 60  
 ACCTGATAGA ATAGCTTNC TNATGAGATA TATATAATGT GATACTATGT TTGGATATTT 120  
 TTGGTCTTAA AGCAAGACTC AGTGGTGTAT CTNCATTAAG AGCTTCCTTT AAAAAAGNTA 180  
 15 CAGGGNTACT AAAAAACAA GNACCCAAAC AATCAAGNTG GGCCACCTT GGNACCNTGT 240  
 TTTGNATNAC CTCCATGGT TTGGTTGGCG GTATGGNAAA AGGATTGNNT GGTN 294

SEQ ID NO:7132  
 SEQUENCE LENGTH:107  
 20 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08368  
 SEQUENCE DESCRIPTION:  
 25 GATCATGCTG TGTGGAGGAC AAATCTTTAA AATTCCAGCA TTGTATTGTC TATTGACACA 60  
 CAAAGTTTGA AAATAAAGGG GCAAAAAATT TTAATGCAAA AATGAAA 107

SEQ ID NO:7133  
 SEQUENCE LENGTH:328  
 30 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08369  
 SEQUENCE DESCRIPTION:  
 35 GATCTGCGAT GGCTGACATN AATAGGTCAC CATGTTGGCA GCTGTATAAT CAGCAATGAA 60  
 AGCTGAATAT TATCACCAGA TAACCAAATT ATGAAATATC TATATNANCT TCANGATTCA 120  
 GGNCCANTGA ACCAGTATCT GCCCTTACGA GATTTAGCTG AANGTGAANT GCAAGGTGGT 180  
 GAACGGCATT CTAACAAGAG TGTGAAGAAA GAGATNGANG GCTGTCCGCT GCTGGAGGGG 240  
 AAGAANGGTG GGGCGGCTTT TNCAAGGCTC TGTGGCTCAG TGGACCTTCA ATANATTGGA 300  
 40 CCTTCAATAA ATTAATTGNA AANCANGN 328

SEQ ID NO:7134  
 SEQUENCE LENGTH:244  
 45 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08371  
 SEQUENCE DESCRIPTION:  
 50 GATCTGAGGG ATTTGCTCGT CATTGCTGT GGCAGAGATG ATGTTGACAC CCTGGGATGC 60  
 TGTGGGAGGG ACAAAGACT CACGTATATG TTCTGTCAA TCGGAGAAGT AAATAATCCG 120

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5 TTGGGATGCC AGGATACTTT ATTCTACAGC GAAGTTAATT TTGTATCCGT CGAGGCTACA 180  
 GTAGAGGTAA AAATGACATT GAGTTGTACT TTGCTTTGAA TTAAAGTTGA TGGGTAGCAG 240  
 CAAA 244

10 SEQ ID NO:7135  
 SEQUENCE LENGTH:48  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08372  
 SEQUENCE DESCRIPTION:  
 GATCTTGACT CCAAAAATTA ATAAATAAAT AAAAATAAAT AAAATAAA 48

15 SEQ ID NO:7136  
 SEQUENCE LENGTH:48  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 20 CLONE:HUMGS08373  
 SEQUENCE DESCRIPTION:  
 GATCATGGTA TAATTAATTG AAATTTATTA AAATCTGTTT TTATTAAA 48

25 SEQ ID NO:7137  
 SEQUENCE LENGTH:267  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08374  
 30 SEQUENCE DESCRIPTION:  
 GATCTGTGAC TTCAAGTTTG GACCGTGGA GAACAGCACT TTCAAACCCA CAACTGAGAA 60  
 TNA TGACACA GGGACAAGTA GCAGTGATAC ATCAGATGAC GACGATGTNT GAAGGATTTC 120  
 CTAACAGCTT TNGAAATCTT AGTGTGATAC ATCTCTCATA CAGTTTGGGG NGAATTGTNA 180  
 AAATGAAAGG ACTATANTTT ATGTAGTGGA ATACCCCN NN AGAAGAGGNN TTTTTTGGGG 240  
 35 GCTTCAACTT GNTGGAAACC NAGANTN 267

40 SEQ ID NO:7138  
 SEQUENCE LENGTH:314  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08375  
 SEQUENCE DESCRIPTION:  
 45 GATCATTGAA ATTCTGAGAA AACTTCTTTT AAACCTCACC TTTGTGGGGT TTTTGGAGAA 60  
 GGTATCAAA AATTCATGG AAGGACCACA TTTTATATTT ATTGTGCTTC GAGTGACTGA 120  
 CCCAGTGGT ATCCTGTGAC ATGTAACAGC CAGGAGTGT AAGCGTTCAG TGATGTGGGG 180  
 TGAAGTTA CTACCTGTCA AGGTTTGTGT TACCCTCCTA TAAATGGTGT ACATAATGTA 240  
 TTGTTGGTAA TTATTTGGT ACTTTTATGA TGTATATTTA TTAAACAGAT TTTTACAAAT 300  
 50 GGAANAAAGA NAAA 314

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SEQ ID NO:7139  
 SEQUENCE LENGTH:349  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08376  
 SEQUENCE DESCRIPTION:  
 GATCCAGAGT AAATGAGAAG TCTCTATCTG AGCTGGTCAG TTAGTGGAGT ACATGTNACT 60  
 AATCTGGGTT TAAAGTTTAC TTCATTATCT GCTAGTGTC TCCACAGCAG TTCATCCTCA 120  
 TCCACACTAA GCCATCCTGT NAGCTTTTAA AGGAAAGTTAA TTAAATTAAC ATTAATATAC 180  
 TCTATGGGCT CCCTCTCCA CCTGTCTGCA TAGAAAGGCA GAATTAGACA TAGCATGCTT 240  
 TGGAAAAGCA AATAGGAATT GTTGGGAATG ATTTANTCTT GTTGTGTGTG TTGTTGTTGT 300  
 TCAGTTGTGG TTCTACATTC CTGGTGNATG NTGAATGTNG CTGTCAAGN 349

SEQ ID NO:7140  
 SEQUENCE LENGTH:347  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08377  
 SEQUENCE DESCRIPTION:  
 GATCTTGTC TTCCATTAA GAAATTCTTC CATTAAAGA AGAAAAAAAA TCTCTCTAAT 60  
 TGAATATCTG AAGATATATG AAAAAGCCTA TGCTTTTAAA TTAANCTGTT AAGACAGTCC 120  
 ATTGAAAGAT TGTGGAAGTN CACATCTATT TTNCACCTTA ATTTTTCCTA TTGTCCCTAC 180  
 TCATGACTCT AAAAAGTGCA TGGCTTGGGG CTATACTTTG TTTTGCAGTT TGTGTTGATC 240  
 GTGCCTTTCC TTATCTACAT TAGCTTAGAC TATACCTTNT TTTTNAGAAG GGGAAAGTGGN 300  
 AATTAAGTGT GGCAAAACCT ATTTNGGCAC ACCNCCTTTG TTCAATN 347

SEQ ID NO:7141  
 SEQUENCE LENGTH:121  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08378  
 SEQUENCE DESCRIPTION:  
 GATCTTAATT CTTTGCAATT ATANATGAAA AATGACTGAT TTTTCTNAAA ATATGTAAT 60  
 TATNTAAATA TATCTGTTTG TACAGATTTT AACCATAAAA ACATTTTGG AAAACCATAA 120  
 A 121

SEQ ID NO:7142  
 SEQUENCE LENGTH:409  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08379  
 SEQUENCE DESCRIPTION:  
 GATCTGGAAA CTATTTGGGT TTTGTTTCA ACTTTTCATT NGGATGTTG NCNTTGCACA 60  
 CACACATCCA CCGGTGGAAG AGACGCCCCG TGAACACACC TGTCTGCTTT CTAAGCCAGT 120  
 NAGGTTGAGG TGAGAGGTTT GCCAGAGTTT GTCTACCTCT GGGTATCCCT NNTGTCTGGG 180

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5 ATAAAAGATN TCAAGCCAGT TGGCGGGATG GAATGGNTGC ACCGCAAATA ATGCATTTC 240  
 TGAGTTTTCT TGTAAAAA AAATTTTTT AAGTAAGNAA AAAANAGGTA ATAACATGGC 300  
 CAATTTTNTT ACATAAAATG GCCTTTCTGG NGTNTAAATT ATTCCTAAAA AAATCCNGTT 360  
 TTATATANAC NATCCAGTTG NTGGAAAAA NTTTTCCAAA NGTTTTTGN 409

10 SEQ ID NO:7143  
 SEQUENCE LENGTH:89  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08380  
 SEQUENCE DESCRIPTION:  
 15 GATCTAGAAA ACTTTGGATT TTTGAAGTAA ATTTAATGT TTCATATTAA TTTCTTGAAA 60  
 ATGTATTAAA TGTCATTGAA AGCCTTAAA 89

20 SEQ ID NO:7144  
 SEQUENCE LENGTH:375  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08381  
 SEQUENCE DESCRIPTION:  
 25 GATCACTGTG GACCATCTTA GCAGTTGACC TAACACATCT TCTTTTCANN ATCTAAGAAC 60  
 TTTTGCCACT GTGACTAATG GTCCTAATAT TAAGCATGTT GTTATATTT ATCATATATC 120  
 TATGGCTACA TGGTTATATT ATGCTGTGGT TGC GTTCGGT TTTATTTACA GTTGCNANTA 180  
 CAAATATTTG CTGTAACATT TGA CTCTAA GGTTTAGATG CCATTTAAGA ACTGAGATGG 240  
 ATAGCTTTTA AAGCATCTTT TACTTCTTAC CATTTTTTAA AAGTATGCAG CTAAATTCGA 300  
 AGCTTTTGGT CTATATTGTT AATTGCCATT GCTGTAAATC TTAATGAA TGAATAAAAA 360  
 30 TGNTTTCATN NTAAA 375

35 SEQ ID NO:7145  
 SEQUENCE LENGTH:513  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08382  
 SEQUENCE DESCRIPTION:  
 40 GATCTCGCTC CTTTGAGAGG TCCCATAAAA GCAAGCACCA TGGTGGCAGT CGCTCAGGAC 60  
 ATGGCAGGCA CAGGCGCTGA CTTTCTCTTC CTTTGAGNCT GCATCAGTTC TTGGTNTTGC 120  
 CTATCTACAG TGTGATGTAT GGA CTCAATC AAAACATTA AACGCAAACT GATTNGGATT 180  
 TGATTTCTTG AAACCTCTA GGTCTCTAGA AACTGAGGA CAGTTTCTTT TGAAGAAGAC 240  
 TATGTTAATT TTTTGCACA TTAATATGCC CTAGCAGTAT CTAATTAATA ACCATGGTCA 300  
 45 GGTTCATTG TACTTTATTA TAGTTGTGTA TTGTTTATTG CTATAAGAC CTGGAGNGTG 360  
 AATTCTGTAA AAATGTATCT TATTTTATA CAGTTAAAT TTGCAGACAC TGTCTATTT 420  
 AAGNGGTTAT TTTGTTTAA TGGATGGGNG ATNCCITNTT AANCACTGGN TTGGNCTGGA 480  
 TNGTGAAGG TTTTNCAGG GNNTAGTTC TGN 513

50 SEQ ID NO:7146

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SEQUENCE LENGTH:180  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 5 CLONE:HUMGS08383  
 SEQUENCE DESCRIPTION:  
 GATCTGAGAA TCTTTATTGA GAAAGAGCAC TTAAGAGAAT ATTTTAAGTA TTGCATCTGT 60  
 ATAAGTAAGA AAATATTTTG TCTAAAATGC CTCAGTGTAT TTGTATTTT TTGCAAGTGA 120  
 10 AGGTTTACAA TTTACAAAGT GTGTATTAAA AAAAACAAAA AGAACAAAAA AATCTGCAAA 180

SEQ ID NO:7147  
 SEQUENCE LENGTH:187  
 SEQUENCE TYPE:nucleic acid  
 15 TOPOLOGY:linear  
 CLONE:HUMGS08384  
 SEQUENCE DESCRIPTION:  
 GATCAAGAAA CTGGAAAATG TGAAGCAATC TCTATTGAGA TAGCATCTTA GTGTTTTAGA 60  
 GAAATCAAGA ATTTTAAAA ACAAGAATAT CAACATTGG TTTTGTGTAT AAGTGGTGT 120  
 20 TGTATTAATA TACTTTTCA ATGAACTGTA TAAACTATGT TTTATTAAC TACAATATAT 180  
 CAGTAAA 187

SEQ ID NO:7148  
 25 SEQUENCE LENGTH:133  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08385  
 SEQUENCE DESCRIPTION:  
 30 GATCCAGAGG CGAGAAGCCA CCCTGTTAGA NCTCCTGTCC ATCATCCAGG TAAGTCAACT 60  
 CTCTCCTTC AGGGCCAATC CCCAGACCTT TTGTTGAGCC AGGNCNNTAT CACCTNTCCT 120  
 ACTNACTTAA AGN 133

SEQ ID NO:7149  
 35 SEQUENCE LENGTH:172  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08386  
 40 SEQUENCE DESCRIPTION:  
 GATCCTTGTC AAAATGAGAT TCCAGGTCCT AGAGAGCTGC TTTNAGGGAG TTCCAGGAGT 60  
 ACTTACTATT GGTGATGCAA TAGGAGAACA GAGACCCGNG GGCTGCTTTG GGGGAGGGGG 120  
 GAACTCGAGA ATGTATGGAT TTACCTGAAA ACAAATTATT CATTTAATCA AA 172

45 SEQ ID NO:7150  
 SEQUENCE LENGTH:250  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 50 CLONE:HUMGS08387

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## SEQUENCE DESCRIPTION:

5 GATCACCATT CAATTGAGT TTCCAGGGGG AAGTGCATGT ATAATGAAAT GATAATGGAC 60  
 TTCAATGAAG AATGTCATCA ATTATGTACA TATGTATTN CTTTAAATAC AAAGTGTAAT 120  
 TTTGTGCCAG TGAATGGAG TCTGAATAGT TATGTGTTT TTTTATCCCT GGAAATATTT 180  
 ATTAACTTT ATAGTTTATC CGAGTATGTT GTATGCTTGG ACAATAAATG ACTATTTTCT 240  
 TCAAAGCAAA 250

SEQ ID NO:7151

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SEQUENCE LENGTH:282

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08388

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## SEQUENCE DESCRIPTION:

20 GATCATCACC ACCACGGTTC CTGAGGACAT CATGTCCAAC CGAGGCAATN ACCTCCTGCT 60  
 GAAGCTCCTG CAGNATCGGT ATCCCCGGGT GATGGCAGAG GAGGGTCTTC GAGTGGTGAG 120  
 GCAGTGGTTG GAGGCCTCCT CACAGCTGGA GGAAGCCTCA NTTTATAGCC GATGGGAGGT 180  
 GGAAGAGGAC TGGTGTCTGT NTGCTCTCCG CTCCTACCAG GCAGAACACG GGCCCGACTT 240  
 CCCCTGGAGC GTGGGGGAGG ACATGAGTGC AGATGGACGG TN 282

SEQ ID NO:7152

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SEQUENCE LENGTH:391

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08389

## SEQUENCE DESCRIPTION:

30 GATCAAAAGTA GAAGCNTTTG AATAATGAAT TTAAGGCCAC GCAAAANCTT TCCTCACCTA 60  
 TTGACATGAC ATCTAAAAGA CATTTCGAAC TCGAAAAGCA TAGTGCCCCA AGTATGGTAC 120  
 ATTCTNCTCT NACTCCTTTC TCAGTGCAAG TANCTAACAT TCAAGATTGG NCTCTCAAAT 180  
 CGGAGCACTG GCATCAAAAA GANCTGAGTG GCAAAANTCA GAATAGTTTC AAAACTGGAG 240  
 TTGTTGAAAT GAAAGACAGT GGCTACAAAAG TTTCTGACCC AGAGAACTTG TATTTGACGC 300  
 35 AGGGGNTAGC AAACCTATCT GCAGNGGTTG TCTCACTCAA GAGNCTTNTA GNCACACAAC 360  
 CAGTCTCTGT TTCAGACTCT GGGTAANTTN N 391

SEQ ID NO:7153

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SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08390

## SEQUENCE DESCRIPTION:

45 GATCTAAAAA TAATTCTTAA TCATGAATTT AATTCACGAC TTCCTTGTTT TCAGTCTTAT 60  
 TCAGCTTACT GTAGGAGATT TTAATANACT AAAGCTTTTG TTGATTATG AGTTAGAAA 119

SEQ ID NO:7154

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SEQUENCE LENGTH:284

SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS08391

SEQUENCE DESCRIPTION:

5 GATCTTGTAC CAAGCCAACG GGTNTCCTGG CTCTCCTGCC CACAGGATGA ACATTTTCGG 60  
 CTCCTTAGG AGTTTTGCCC TACCGTATTC CAAAGCGTGT GCTGGTTTCT CATATTGTCT 120  
 GTAGGCTCAC TCAGCCCGCA GTTTATGTGT GTGCTTTTTT CTATGAAAAA TGATGTATTT 180  
 TGCTACTTCC TGTGTACAAA GTTTATTGT AAATGTTTTT TGTGCTTTGC ATGAACAGGG 240  
 10 GCCACGTTGT TGCAATTGTT TCAGTAGAAC TGGTTTGATT TCTN 284

SEQ ID NO:7155

SEQUENCE LENGTH:289

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS08392

SEQUENCE DESCRIPTION:

20 GATCGAGACC ATCCTGGCTA ACACAGTGAA CCCCCTCTCT ACTAAAAATA TAAAAAATTA 60  
 GTCGGGCATG GTGGCGGGCG CTTGTAGTCC CAACTACTCG GGAGACTGAG GCAGAAGAAT 120  
 GCGGTGAAGT CAGGAGGGCG ANTTGCAGTG AGCCAAGGCG ACAGAGCAGG ACTCTGTCTC 180  
 AAAAAATAAA AAATAGTGCA CTGTCCTTCG AGAAAGTTTT CTAACATCTA GTAATTGTGA 240  
 ACTTAGAAGT GGAGTTGCCT TGTGGATGTC TTTTTCGCAT TCTGTAGGN 289

25 SEQ ID NO:7156

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08393

30 SEQUENCE DESCRIPTION:

GATCCAACTG CAGAGATGGC AGCTGAGTCA TTGCCAGTNT CCTTCGGGAC ACTGTCCAGC 60  
 TGGGAGCTGG AAGCCTGGTA TGAGGACCTG CAAGAGGTCC TGTNTTCAGA TGAAAATGGG 120  
 GGTACCTATG TTTCACCTCC TGGAAATNAA GAGGANGNNT CAAAAATCTT CACCACTCTT 180  
 35 GACCCTGCTT NTTTGGCTTG GCTGACTGAG GAGGAGCCAG NACCAGCAGA GGTCAACAAG 240  
 ACCTCCCAGA GCCCTCACTC TCCAGATTCC AGTCAGGGCT CCCTGGCTCA TGN 293

SEQ ID NO:7157

SEQUENCE LENGTH:69

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08394

SEQUENCE DESCRIPTION:

45 GATCACGATG TAAATAATNA AGCATTTTGG TAGGATGTCT ANNGTAATAA ACAATTTTGG 60  
 TACCATAAA 69

SEQ ID NO:7158

SEQUENCE LENGTH:312

50 SEQUENCE TYPE:nucleic acid

55

# EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS08395

SEQUENCE DESCRIPTION:

5 GATCTTGGCC TCCCAAACCC CTTATTTTAA AAATACTTTG CGCCTTGCTT TGATAATTTG 60  
TATTATGTAT CCAAACGTAA ATNATCTGCT TTCTGCATTA GAATGTAAGC CCCCTGAGGG 120  
TTGAGTCAGT CTGTCTTGTG TGCTGTGCCA CGCCTGATGC CCAGCCCAGC AGCATGCTTT 180  
GTACACTGAT ATATTGGGTA AATTTTGTG AATAAATTAA GCTCAACTAT TTGTATTCA 240  
10 ATAGNTTGGAG TTGTATTGCT TCCTGTTCTT CAAGCTTAAA TTTGACCTGT CTAATAAAAA 300  
GGAGNAATTA AA 312

SEQ ID NO:7159

SEQUENCE LENGTH:92

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08396

SEQUENCE DESCRIPTION:

20 GATCTTTTGT GGTCTGTAA AAGATACTGA GGAATGTNTT TCAGCCAAGC CAAGAGGATG 60  
GTTTCAATAA ACCTAATAAT CTGAAGTTCA AA 92

SEQ ID NO:7160

SEQUENCE LENGTH:61

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08397

SEQUENCE DESCRIPTION:

30 GATCTTGCAA TATATACTCA GGAAATTACC ATGGGCAGAA TAAATGCTT TAAAAATAA 60  
A 61

SEQ ID NO:7161

SEQUENCE LENGTH:319

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08398

SEQUENCE DESCRIPTION:

40 GATCCAACT GNAGAACTTC TCATTATCC CCAAGGCCTC CAGGCAGTAT CCAATGGGGA 60  
ATCAGCTCTA AAAGGAACCA GACCAACGTT TTCCAGCCCC TTNATTCTGC TTCNTCTGT 120  
NTNAGGAAAG GNTAGAAATN TTCAGGGCAT CATCATACAG GCTCCTCATC TACAAAGTTC 180  
CAGTAGCAGT GACGCCTACA CGGAAGANTT GGAAGTCAA ACAGGCTGGG GTCACCTCAN 240  
TNGCATCTGA CGCTGTCCAA CCAGAAGTTC GATTTNNTN CTGGGGGTGA AGGTGGAAAC 300  
45 AGACTGTACT TAAAGGNTN 319

SEQ ID NO:7162

SEQUENCE LENGTH:134

50 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55



# EP 0 679 716 A1

CLONE:HUMGS08399

SEQUENCE DESCRIPTION:

5 GATCCANAAA TAAGTTTAAC TTACGGAGGC TTCTAGTTCT AAAGATGCAA NGTAAGATGC 60  
CAAAGCAGTG GAAAGATTGA AGTCAAACAG TCGGGCCCAT GTGTGTGTCN TACNTCAACC 120  
NTTNGTGTGT TATN 134

SEQ ID NO:7163

SEQUENCE LENGTH:147

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08400

SEQUENCE DESCRIPTION:

15 GATCTATGTG TCTGTNTGTG TGTCCATCCC GCCGACCCCC CAGACTAACC TCCAGGCATG 60  
GACTGAATCT GGTTCCTCTC TTGTACACCC CTCAACCCTA TGCAGCCTGG AGTGGGCATC 120  
AATAAAATGA ACTGTCGACT GAACAAA 147

SEQ ID NO:7164

20 SEQUENCE LENGTH:320

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08402

SEQUENCE DESCRIPTION:

25 GATCTAGNAA CTAGNAAATA CTATTTGTCC CAGCAATCCC ATTACTGGGT ATATACCCAA 60  
AGGAATATAA ACCATTTAAT TATAAGATA CATGCAGATT TTTATTCATT GCAGCACTCT 120  
NNACAATAGC AAAGACACAA TAGCAATGTC CCATCAAAGA TAGACTGGAT AAAGAAAATG 180  
TGGTACATAT ACACCATGGA ATACTGTGCA GTGCAGCCAT TACAGCTTTT GGTGATACAG 240  
30 TGAATCAGAT TTTNNATTAA TTCCTTTAAT TGGTTATTAC TGNCGTGGA NNAGTAATGG 300  
TTTGATTGG NATCCTTGNN 320

SEQ ID NO:7165

35 SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08403

SEQUENCE DESCRIPTION:

40 GATCCATATT TTAATTGCA ACCCTGTTCC CTATGATACC TATCTGTCTA TGAATGAAAC 60  
AAAGGTTTAA CAAA 74

SEQ ID NO:7166

45 SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08404

SEQUENCE DESCRIPTION:

50 GATCCAAAGA ACTTCTGTTA TATGGGTTAT AGCTGTTAAT ATTTGTCATA TTCGAAATTG 60

55

EP 0 679 716 A1

AAATAAGATT TTAAGGTATT TTAATAAATC AGTNCAAAAC CATTGTATNT TGACATGAAT 120  
AACACTTTTA TGAATAAATC TATATTCCAA AACAATAAAA TTACCAAAAA GTTGCAAA 178

5 SEQ ID NO:7167  
SEQUENCE LENGTH:98  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08405  
10 SEQUENCE DESCRIPTION:  
GATCACAGAT TTCATCAGGA TTGAGCTGCG TGGTAAGCTC GCCACTCTGG ACAAGTCACA 60  
GGGTACCCAT TATTAGCAA TAAAAGCTTT AACTCAAA 98

15 SEQ ID NO:7168  
SEQUENCE LENGTH:110  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08406  
20 SEQUENCE DESCRIPTION:  
GATCTCTGTG GCCTAGGTTT TGTACATACA GAAACTGCAT GGTATTTAAA TTATTGTTTG 60  
TCTCTGATGA TGTATGCAGT TTCTTTAAAA ACAAACCAAA AAAAAGTAAA 110

25 SEQ ID NO:7169  
SEQUENCE LENGTH:298  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08407  
30 SEQUENCE DESCRIPTION:  
GATCCTGAAG AGCGCTGAGG GACGGGTGCT TCGNCGANCA GCACCAGCGA NACGTCAAAC 60  
TCATGAGACA GATGCTAATG GATGCCGNCC TCCCTANTTG TCCACTGCCC CAGCCACATC 120  
ATCCCTGTGC GGGTTGCAGA TGCTGCTAAA AACACAGAAG TCTGTGGATG AGCTAATGAG 180  
CAGCCATAAC ATCTACGTGC AAGCAATCAN TTACCCTACG GTGCCCCGGG NAGAAGAGCT 240  
35 CCTTCGGGNT TGCCNCNACC CTTNNGGGGG GACCCAGGA TTGNTGGAAC TAANTTCN 298

SEQ ID NO:7170  
SEQUENCE LENGTH:329  
40 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08408  
SEQUENCE DESCRIPTION:  
GATCCACCCG CCTCGGCCTC CCAAAGTGCT GGGATTATAG GCGTGACCNC TGCACCCGGC 60  
45 CAAAAGTTGA TTTTAAATTA CATAAAATC GTAAAACTT CTAGTAAAAA CTTGATTNNG 120  
NGANTACAGT TATATTTTAA AACCTTAAGG TGACAAGCAT TTTCTATGCC TAAATCTTCA 180  
TTGGTTTGCC TGGAAAGAGT CTCTGTAAA AGATTTTCCA TATTCAAAGT AAAAGGAAAG 240  
ATTCTTGCT TTCTAATTGT CTTTGGACA CATGCCTATT TTCTTTGAGG TATAANCCTT 300  
50 TAGATGTGAA ANATGTAATT TCCATTCCN 329

55

SEQ ID NO:7171

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

5 TOPOLOGY:linear

CLONE:HUMGS08409

SEQUENCE DESCRIPTION:

GATCCAGATT TTTCTGTTG TGTCTGAAGA GAACCATGAC ATTTAGAAGT ATATTGGTAA 60  
 TCTATTAGGT CCATTGGCAA AGTATATTGG TCCATATTCA AACCTATTCC AAAAGGTTAG 120  
 10 AAGTGTTTAA GATTCCCTTA TTGTGGTACC ATGTCTGTTT ACCTATGCTT ATGAGCAACA 180  
 ATAANTTACT AGTTTACCTT CTGGAATTTT AAA 213

SEQ ID NO:7172

15 SEQUENCE LENGTH:332

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08410

SEQUENCE DESCRIPTION:

20 GATCTGGTGG GCAGTCGAAC CATGGTGAAC TCCACCTCCG TGGAATAAAC GGAGATTCAG 60  
 CGTGGGGCAG TGAATCCAGC ACGTCTGTGT GAGTANCGGG ACAGTAAACA CTCCACATNN 120  
 NNTCAGTTTT TCACTTCTAC CTACATATTT GTATGTTTNN NTGTATAACA GCCTTTTCCT 180  
 TCTGGTTCTA ACTGCTGTTA AAATTAATAT ATCATTATCT TTGCTGTTAT TGACAGCGAT 240  
 25 ATAATTTTAT TACATATGAT TAGAGGGATG AGACAGACAT TCNNCGGGNT ATTNCTTTTA 300  
 ATGGGCACAA AATGGGCCCT TGCCTCTAAN GN 332

SEQ ID NO:7173

30 SEQUENCE LENGTH:332

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08411

SEQUENCE DESCRIPTION:

35 GATCCAGAGG CTCAGTGAAC CCCATCAACT TGGTGGCCCT GGTGTCTCAC ACTTGATATCC 60  
 TTCTGCCCTC GAGACCTGGC ACAGCAGTAT CCCTTGAAGA AATCCTGAGG CTTTGTAGAG 120  
 TGTCCTTGA CCATGTTTAA TAATCTTCC CTCCCCTGCT TGTNTATTTT TTTCTCTTCA 180  
 CGGCTCTTCC TATACCTTAG GCCAGTCTCA AGCACTCACT GGAGACCCTT GGGCCTTGGG 240  
 CGACCATTGA GTCCTAGTCT CCCTTGTTTG TGCCCCTGTA GGAGGTAGGT CCTTTTNTCC 300  
 40 TCCGGCCTAG TAGGGGACCT TGGGTAACAT TN 332

SEQ ID NO:7174

45 SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08412

SEQUENCE DESCRIPTION:

50 GATCTGCTTT GCAGAGGAAA TAACCTGTTT TTTCTCATGT TTCATCTTCT TTTTATGTAA 60

55

ATATGTAATA CTTTCCTATA TGCCCTTTG AAATNTTTGG ATAAAAGATG ATGTTTAAAG 120  
TTCCAAA 127

5 SEQ ID NO:7175  
SEQUENCE LENGTH:144  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS08413  
SEQUENCE DESCRIPTION:  
GATCTGCCCG CCTCAGCCTC CCATTGTTGA CCATTTTAT ATGTTTATTT ACCTATGTGG 60  
TTTTCTTTTC TCATAAAATG CTTGTTTCATA TATTNCCCC ATTTCTACTT ATCTNGTTCT 120  
TATTAAATNG CCAAAGTGCA TAAA 144

15 SEQ ID NO:7176  
SEQUENCE LENGTH:347  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
20 CLONE:HUMGS08414  
SEQUENCE DESCRIPTION:  
GATCATCTCT AAAATTAAAA AAATTAATAT TAAATGTTGG ACCAAGGATT TCAACCATGC 60  
AGTATGTTGC TTCTGGGGTC TGCTGTCCTA TTCCAGCCCT AGTGAATAGT TAATGCCTTG 120  
25 AACTATTCTC ATCACCACAG GTTGCCAGGC CACCAAATAA CGAAGCCAAT CCAGGATTTG 180  
TCCATACAGA AAATGTGTGC GCTCCCAGCT AAATCTCAGT TAAGGAGGTT GTTCTATATA 240  
CAGCCAAGTA GCAGAAATAT TCATAAATGT CATTGCAAA TATAATAAAC ANTGTAATGA 300  
ATGGGTATTT CCTTCTTGT TAATCTATG TGCTCAATTA AAAGGNN 347

30 SEQ ID NO:7177  
SEQUENCE LENGTH:213  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
35 CLONE:HUMGS08415  
SEQUENCE DESCRIPTION:  
GATCATACTA ATAATTTAAT ATTTGAATTG TATGGAAGTA CAATTCAGTA TCATTTTACA 60  
TATGGTATAT TGTGATGCTG TATCATATTT TATGTTACGG TTTATAAGAA AAGCTCCTAG 120  
GTATAAAATG CTACATAGCA GGAACCTGGT TTTCAATGT TATTATTCC TACTGTTTTT 180  
40 GACGTAACGG CAATAAAATT TGTTGAACC AAA 213

45 SEQ ID NO:7178  
SEQUENCE LENGTH:161  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08416  
SEQUENCE DESCRIPTION:  
GATCTTAAGA AGAGAATAGA ATCTTTAATT GACCGGGACT ACATGGAAG AGATAAAGAA 60  
50 AATCCAAACC AGTACAATA TATTGCATAG AATGTTGGCC TTGACGATT TGGTGTCATA 120

55

TGCAGTAGCC AGTGGATAAA CTAACCTGTT GATTCAATAA A

161

SEQ ID NO:7179

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08417

SEQUENCE DESCRIPTION:

GATCATGTGC AATATTCTT ACTGTGCCGA GAAGCCACAA TGAGCGAGAT TAAAGCTGTT 60  
 TAACACAAA 69

SEQ ID NO:7180

SEQUENCE LENGTH:348

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08418

SEQUENCE DESCRIPTION:

GATCTCTGTT CCTTTGGCT CTAATATGCT ACAACTGTAG GCCAATTATC ACTTTACCAA 60  
 TTAAGAGTTA GGCCAGATAA GTGAAATTTA ACTTAAGGGC ACACAGCTAA TAAGTAATAG 120  
 GCCTAAACTG GATTTCCTTA TTCCAAATCC TGTCTTTTCC CCACTATTCC ATTAGACCCC 180  
 ACAAATGTTA GTTGTGTGTG TGTGTGTGTG TGTTTTAAAT CACTGTAACC GGGTGCATTT 240  
 TTTTAAGGCA AAATTTCTCC CTTATCTACT GTGATGACTT CAGAAGATAC ANTGGTCCCA 300  
 GGGGCCAAGT AGAAAGCATT TTAAAGNTT AATCTGAATT AAGCTGAN 348

SEQ ID NO:7181

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08419

SEQUENCE DESCRIPTION:

GATCCACTTC TGTAATTAAG TACNTGGTTG TCTCGTGATG CGTCTACAGT TATTATAGT 60  
 TACAACCAT ACCNGNCACT GTAGATACAC ATATAAAAT AGNTGTTNGG TATCCATAGT 120  
 TNCGCTTGTT CN 132

SEQ ID NO:7182

SEQUENCE LENGTH:85

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08420

SEQUENCE DESCRIPTION:

GATCTCATCA CTGCACTCTA GCCTAGGTGA CGGAGCGAGA CCCTGCCGCT AAATAAATAA 60  
 ATAAATAAAT AACATAGTAG TGAAA 85

SEQ ID NO:7183

SEQUENCE LENGTH:224

# EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS08421

5 SEQUENCE DESCRIPTION:  
 GATCATGGAC TGGTGCCTTT GCATTCAGAA GGAGAGCTGT CAGCGTANAC CGAATTCAAG 60  
 ACCAAGGCGT GCTACCTGAG CTGACAGCTT TTTGAAAGCC GAGCTGTTTC TGAACCATGT 120  
 ACATACATGT TCTGAAACTT TCTCATCATT TTATGAGTAC TGTTTCATTGA GAGATGACAA 180  
 TGAAGATTAG ATGAAATTGG AAATAAACCA ACATTGTTTA CAAA 224

10

SEQ ID NO:7184  
 SEQUENCE LENGTH:38  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

15 CLONE:HUMGS08422  
 SEQUENCE DESCRIPTION:  
 GATCTCTGCA GTATTAAAAA GATGTACTCC CAATTAAA 38

20

SEQ ID NO:7185  
 SEQUENCE LENGTH:67  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

25 CLONE:HUMGS08423  
 SEQUENCE DESCRIPTION:  
 GATCTTTGGC AGTGCCAGCA GGTAAATTT TGACCTGCTC AATTAATAA AAACACTGGC 60  
 GTTTAAA 67

30

SEQ ID NO:7186  
 SEQUENCE LENGTH:117  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

35 CLONE:HUMGS08424  
 SEQUENCE DESCRIPTION:  
 GATCTTCAA GAAGAGAATG TAATTATAC CATGAATATG TTATTTTTTC ATGTTGGAGC 60  
 ACTGAAATAC TTTCAGTTTG TTTTCTTATT GTTTAAATAA AATTTTAAAT TCTTAAA 117

40

SEQ ID NO:7187  
 SEQUENCE LENGTH:231  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

45 CLONE:HUMGS08425  
 SEQUENCE DESCRIPTION:  
 GATCTTTGTT ATTTTAGGGG GGAAATCACA TGGTATCTAG CATGGGACAA AGCAGCAAAA 60  
 TAAACCAAAA GGACAATCTC TATTTTATAT AGAAAATAAA CATACTTTNC TGCATCCTGT 120  
 GTACTTTAAG TATATCTATA TTTNTNANGG GTTCATACTG TGTTGANITT NCCTNATGAN 180  
 ATAGTCACTT CCCAGTGTA TTTTAATGCA AATGCATATN CTATAANNTA N 231

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EP 0 679 716 A1

SEQ ID NO:7188

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08426

SEQUENCE DESCRIPTION:

GATCTCTGTT CTAAGAAAAG GAGTGTGCCT TGCATTTAAA AGGAAATATT GGTTCCTAGG 60  
 GAAGGGAGGA GGCTAAATAA TTGATACGGA ATTTTCCTCT TTTGTCTTCT TTTTCTCAC 120  
 TTAAGAATCC GATACTGGAA GACTGATTGA GAAAAGTTT TAACATGACA TTAAATGTGA 180  
 AATTTTAAAA ATTGAAA 197

SEQ ID NO:7189

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08427

SEQUENCE DESCRIPTION:

GATCAGGAGA CAGGGAGGCC CCGCACATCA CACAGATAAA GTCAGACAAT TGTAATTAAT 60  
 ACTTTTGCTG CCTCAAGTTG TTTTAAAAAT AAAGTACTTT GAAATGCATG AGAAA 115

SEQ ID NO:7190

SEQUENCE LENGTH:329

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08428

SEQUENCE DESCRIPTION:

GATCCTTGTG GGCATTATTC TAACTGATAC GTAGACACTT ACTTGGAAN NNNNGGACAT 60  
 TATATTAAT GAGTGCTATC TGTGAAATTG GTTATATTAG GTGGCTTGAC TAATGTTTTT 120  
 CCTATAATTG TATATGGACT GCATTTTAA AAAAAACCGC ATTTGCCTTT ATGCTAGATT 180  
 GTAAAAAATT ATATTAGAAT GCATAAGACA TGTTCNCCN TCATATGCTA GACTTTCNCT 240  
 AGCATTTTCG ATTTCTGTGT TGTGAGTGTG TGATTTTAA ACCGGAATTT GGTAAAAA 300  
 AAATCTGGTG GTAATATATG TGAGAANTN 329

SEQ ID NO:7191

SEQUENCE LENGTH:353

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08429

SEQUENCE DESCRIPTION:

GATCTTCATT CCAAATTTA CTGCATGGAA ATGACTAATA ATGTGCATAA AAAGTTAACT 60  
 ATAAGGATGC TCACTGCAGG GTGGCTTATA TTAACACAAA TTCACAAACA ACTCCACTGT 120  
 TCCAGCACAG CAGTGTGTTG TAAATCATGA CATGTTTCTA TGCTCAATTA CTATCCAACT 180  
 TTTGAGAATT AGGTTGGAGA TATGTAATTN CCAATATGAA AATAAATTC CTATATNCTA 240  
 TTTAGTAAAA NTAATTCATA AATNTCCATT TTNCAACA CTTTCATGAAT TTNTTCCAAA 300

ATACANATGT TATCTATCCA TTTNGGAATT AGGANTGGTT NNNATCATTT TGN 353

5 SEQ ID NO:7192  
SEQUENCE LENGTH:352  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08430

10 SEQUENCE DESCRIPTION:  
GATCTCAGTT TTTCCATCAA AATTATAATA TGCTCATGAA AATAATATTA ATTTGCCTTC 60  
CCTTTGCAAA CACCGGCAGT TGAAAGGAAA AGGACGGGGA ATGTGANNNN AAAGAGACCG 120  
CCTGGAATAA ATGTCCCCCT ATGATTCTTT AAGGCAGTGG TTCTCGAGCT TGAATTTTCA 180  
15 TTAGGAAATT CTGTGAGGNG NTTGTAACCA GATTTCTGGG TCTGCCACAT GCACCTATCT 240  
NTNGCTGAAT TGCTTTAATA GAATAATGAG AGCAAGTTTG TCTAACTAAT ACCAACCTGN 300  
CANCTTGAAT ANCAATAAAA TGCAATTTGG TACATAAATT ATAATGCTGC NN 352

20 SEQ ID NO:7193  
SEQUENCE LENGTH:348  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08431

25 SEQUENCE DESCRIPTION:  
GATCCTGGAG AGGAGAAATC CTGGCCTCTG CTCATGCGCA GGTCAACAAC GGGCTGGAAG 60  
TGCGGTTNAG CTCTCTGCCA CTTTCTTCAA TGTAAGAAAGT AGGCATCAAA GATACGACTT 120  
CTACTATATA CATTTNTNTG TCCCTGAGAA CAGAGAAACG TAACCCTGTA GGGGACTGGT 180  
TACAGAGGAC CTCCTGGAGC ATCTGCCCCA TTCCTCCAAG TCCAAGCACA GCCATGCTGA 240  
30 GTGGAAGCNA GGCCACCATC TGAGTGGATT GGTCCCAAGT NTGTAATGAG GAAAGTGGCC 300  
AGGTGCCGGC ACAGTGCCCTC TCCCAGAGCC TCAAGAAGGG CCATTNGN 348

35 SEQ ID NO:7194  
SEQUENCE LENGTH:349  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS08432

40 SEQUENCE DESCRIPTION:  
GATCACAACCT CTCAGTCTAC CTGGAACACC CCACCCAACA TGCCTGCTGC CTGGGGACAT 60  
GCCAGTTTCA TCAGTCTCTC GCCCTACCTC ACAAGCACCC GAAGCTTGTN TCCAATGTCT 120  
GGACTTTTTG GTTCCATCTG GGCCCCGCAA AGCGATGTGT ATGAAAATTG CTGCCCCATC 180  
AACCCACCA CGGAACATTG GACCCACATG GAAAACCAAG CGGGTCGTGT GCAAGGAATA 240  
CTACCCGGGG TTCAACCCGT TTCGCGCCTA TATGAACCTG GACATATGGA CTACCACAGC 300  
45 GAATAGGAAT GCAAATTTCC CACTGTCTAG AGACTCGAGT TACTTGTTNN 349

50 SEQ ID NO:7195  
SEQUENCE LENGTH:342  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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# EP 0 679 716 A1

CLONE:HUMGS08434

SEQUENCE DESCRIPTION:

5 GATCTGCCTG CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCCTGAGCCA CTGCGCCAG 60  
 ACCAAAAAGTT TTTTAAATG GATGTTTTAC AGATAGAACT AAATTCTTCA TTTACCTCAC 120  
 TTAATTTCTG AAAACACTGT GTCCTCCAAC TGCTCTGTAT TCCCAAAGAT TAAAATTAGC 180  
 CTTGGGGAGC AGAGCTGGTT CCTCGTAAAC CCCTGTGAGT GCCCAGACCC TTTGGAGGAG 240  
 GTTCTCAGTG GGCTTTTGCC TGCTCCACA GATGTAACCC ACCCTTCCTG CTGCTCCTAA 300  
 10 GACCACCATG AGGAAGGCTG GGAATTGGCT CTTGAATTAA NN 342

SEQ ID NO:7196

SEQUENCE LENGTH:364

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS08435

SEQUENCE DESCRIPTION:

20 GATCTGCATT TNNAGGTTC GAGCCTGACC CCTGGAAGT ACCAGCGCTC GATTGTNAGC 60  
 CTTGGCCTGG GGTTTTAACC TTGCCAGTGA AGTTTCGGTT TAAAGTGAT TAAATGTCAC 120  
 TTCTCATCA GTTCACTTC TGGAGGTTT CTTATCCTAC TCCCTGGTGC CAGGGACGTA 180  
 CCTGGGAGTT TGAATCAGGC CCATTTGAGC GTGGCAGCCG TGTGGGTGA AGGTCCGGGG 240  
 CTCGGTGAGG CACTGGGGGG GTTTTCGGGA GGAAATGAA AATGCTTCTA GAATGAGTGA 300  
 25 ACCACATCAT AGCTCTCACT GTTTTTTCAA TAGCTACTTT TTTTAGCAGA CACAGAGCC 364  
 ACAN

SEQ ID NO:7197

SEQUENCE LENGTH:30

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS08436

SEQUENCE DESCRIPTION:

35 GATCTCAAAA TAAATTCAGA AAGAAATAAA 30

SEQ ID NO:7198

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS08437

SEQUENCE DESCRIPTION:

45 GATCTGCCTA GCCAACTTTC TTAACCCAAG CCCAACTGA AAGTCTAAAA GATGTATTTC 60  
 TGGGGAATTA CCCACCTCA ACATTCTCAG GTTNCCAGT GTNCTCTGTC TGTNTCAGTA 120  
 TTTTAAAAAC ACTAACTCAA TAATNCTCAA AAATCAAAGT CTGCTTTNAT NATCTGGTAA 180  
 TAAAATAATA GGCAAA 196

SEQ ID NO:7199

SEQUENCE LENGTH:102

50 SEQUENCE TYPE:nucleic acid

55

EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS08438

SEQUENCE DESCRIPTION:

5 GATCCGCCCA TCTCCGTCTC CCAAAGTGCT GGGGAATNACA GGCCTGACAN CCAAACCCGG 60  
CCTGATTAAA GTTAAATAAA TACTAGTTCC CTTCTCGTCA AA 102

SEQ ID NO:7200

SEQUENCE LENGTH:341

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08439

SEQUENCE DESCRIPTION:

15 GATCAGTGCA TTTAGACATC CAGAAGTTAC TTCCACTATT GAGGAACTAT GTAGACATGA 60  
ATTTAAGCTT GTACATGTGC CAATCTTGTT AATGTCATT GACCACTGAT TCACATAGAC 120  
AGACATTAAC GTCTGATGCC TCAGGTTGAT GCGGAACTTN CTTCTAGTG TCTTAACATT 180  
TATGANCTTA TGTTTGACTT GAGGGGCATT TCAGCAAAGC TGTGNAGGAA AAGTAGGTTT 240  
TGGNCTGATG TCTGCTTTGT NCCATAGACA TTTTGGAGCA TAAGGNAGTA TCTNCTTCTG 300  
20 CTATATGTNC AGGGCTTGTC CCCAAATNAA TTCCTGATTT N 341

SEQ ID NO:7201

SEQUENCE LENGTH:110

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08440

SEQUENCE DESCRIPTION:

30 GATCTNCTAC AGTTCTNCA AGCCTAGACA ACCTAAGAAA CTTTACTATC AGCAGCTTAA 60  
GTGAAAATC ACAGACTTTA AGAACAGGCG AAGTTTAAAN TGTATATNNN 110

SEQ ID NO:7202

SEQUENCE LENGTH:45

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS08441

SEQUENCE DESCRIPTION:

40 GATCCAAAGA AATAATCCAA AATAAAAAGT TATATCCAAG ATAAA 45

SEQ ID NO:7203

SEQUENCE LENGTH:202

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS08442

SEQUENCE DESCRIPTION:

50 GATCCACAGT GGAGTTTATG TAATTATATT TTNTTGATTT CTTGATTTTG TTTTCTGGTA 60  
TAAAGTAGA GATAATGTGT AGTCACTTCT AATTTAGTGA AACCAATTGT AATAATNTG 120  
GAAATATTTT GTCTTTAAGT GTAAATATTT AAAAAATTGG CATACCCTAA TGTNAATAAT 180

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